An Introductory Lecture
ON
PROGRESS IN MEDICINE.

Delivered at University College, London, at the Opening of the Winter Session, Oct. 1st, 1896,

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GENTLEMEN,—The first duty I have to perform is a very pleasant one. As representing for the time being the medical faculty of this College, I bid a hearty welcome at the commencement of a new session to those of you who are returning to your studies as well as to those who are about to commence them. "Welcome" is, I think, an appropriate word to use to those of you who are about to study medicine, for it implies that you are about to attain something which is worthy of attainment. This is the least that can be said of the profession of medicine—namely, that it is worthy of attainment. It includes a study which will give you a great and intellectual interest in life, will exercise the faculties you possess to the utmost, and if rightly pursued will lead to the highest result of life—the knowledge of good, useful work done. In its scientific aspects the study of medicine has interested the greatest minds that have lived, and not a few of the past great teachers of the world have either had the advantage of an early training in medicine or, in the absence of this, have turned to branches of the subject for the expression in prose or poetry of thoughts and illustrations of the deepest problems of life. In all its varied aspects medicine has to do with life and death; with the study of life and its phenomena, and with the prevention of death from preventable causes, and thus with the prolongation of life. It possesses the great advantage of having both a scientific and a practical side. The study of the phenomena of life as shown in the ultimate elements of the body—of the chemical and physical and other properties of the living cell—is a branch of medicine on which the highest faculties of the mind can with advantage be concentrated. The like may be said of the study of the variations in disease which these ultimate elements undergo. But however abstruse or learned may be the investigation of these phenomena it must never be forgotten that the reason of our existence as students of medicine is a practical one—to aid nature in the cure of disease, to allay pain, to prolong life. With this high aim, intimately mixed up as it is with the welfare of our fellow creatures, it is satisfactory that the study of medicine, both in its scientific and practical aspects, is a progressive one—that we are passing, and have passed, from the darkness of the sorcerer, medicine man, and herbalist to a clearer knowledge of the processes of disease and of the means of counteracting them. And even though the essential phenomena of life are still far beyond our comprehension the progress that has been made gives good hope that in the future much will be accomplished in the way not only of disclosing the secrets of the processes of disease but of the discovery of rational means of counteracting them. In the history of medicine, as in that of many other practical subjects, the great change that has taken place has been from the speculative to the real. In all ages thinkers have had before them the phenomena of life—the beat of the heart, the presence of blood, the exercise of the mental faculties, the phenomena of birth and development, and the passing of life into death. And it was but natural that the cause of these phenomena should be investigated by those following learned pursuits. Accurate knowledge of the body, both anatomical and physiological, was scanty, so that speculation, often of the wildest character, tinged in some cases indeed by theology, was indulged in to explain what a more extensive knowledge of facts would have made clear.

Real progress in medicine is made by two processes. The first is the accumulation of facts either by simple observation or by observation and experiment; the second is the interpretation of those facts. The first is discovering what can be seen; the second is describing what the seen means. In the work of progress, in the accumulation of facts, many different kinds of workers are engaged. Some there are who deal only with facts, who in their extreme type are content to expand knowledge by devoting themselves to counting the scales on a butterfly's wing. Others, again, are more inclined to speculation and theory, accepting the facts as they are presented to them by others. Both kinds of workers have their use, provided that the man who studies facts is correct in his observations and the man who theorises uses accurate facts as the basis of his theories. Human nature is, however, very fallible and the human mind really very limited. The investigator is not infrequently uncertain of his facts on which the theoriser builds his castle of straw, and only too commonly he is blinded by some preconceived idea which endangers the accuracy of his work. A cynic, I believe, has remarked that the duration of a physiological fact is four years, or some such period. Although this is not a strictly accurate statement it serves as a warning of the danger of hasty conclusions. The greatest lesson one can learn in the training for the career of medicine or of science is accuracy of observation and of record. Ideas are multitudinous; perhaps all the theories in medicine will be found in ancient books, and in most of the modern developments of medicine that have been made there is usually some one to say that it can be found indicated in Galen or Aristotle. This may be so, and a man may be very near a discovery and yet not make it.

"Our very eyes
Are sometimes, like our judgments, blind."

With such thoughts to keep one humble in the pursuit of knowledge the cultivation of accuracy of observation and of record is the basis on which all progress in medicine is to be made. How difficult it is to cultivate everyone knows who has followed the advance of scientific medicine in the past years. All progress is associated with failure, anomalous as it may seem—the failure of the individual to attain his standard. Such failure, which need not necessarily be known to anyone but the worker himself, does not therefore mean retrogression. All good work in medicine, as in other allied subjects, is done for the love of the subject itself, not for mere remuneration or the achievement of greatness in the eyes of the world, but with the aim of adding some iota to the general knowledge and of leaving the world better for one's existence. So it has not infrequently been in the world's history that the simplest and lowliest of men have achieved the highest ends.

This century has been the age of progress in medicine as in other fields of natural knowledge. In medicine the progress, I think, has been quite as marked as in physical or chemical science, and the results have been obtained by the patient work of many individuals. Progress has been made in many different ways, to a great extent simply by the accumulation of facts, anatomical, physiological, and chemical, both in healthy and diseased conditions. This accumulation of observations has now increased to such an extent that it is impossible for one person to know all the recorded facts; much more so than in previous ages when workers were few and opportunities for observation and recording were more scanty than at present. The development of the experimental method has also greatly aided the progress of medical science and has been the means of improving the treatment of disease. Experiment to elucidate natural phenomena is a very ancient method, as it was used in alchemy. In medicine it is of the highest importance, not only in the investigation of the scientific branches of our subject, but actually in the treatment of disease. In not a few cases the treatment of disease is an experiment, one intended to benefit the patient, it is true, but still an experiment, since all the conditions present in the body when we give a drug or apply a treatment are not known, and we watch the result to ascertain new facts, which may be favourable or unfavourable. The method of experimentation is one, therefore, worthy of being included in the training of the medical practitioner. There are good experiments and bad, the latter from various causes, some of which depend on the experimenter and some on the inherent difficulty of the subject investigated. The investigation of the natural phenomena of life, and also of the processes of disease, presents very great difficulties owing to the complexity of the subject. Most of the treatment of disease is still empirical. It was empirical before the development of scientific medicine, since something had to be done to alleviate disease. This empirical knowledge is by no

means to be despised, since in many cases it has given to scientific experimentation the clue to the mode of investigation of a morbid process.

It will not be out of place to indicate a few of the directions in which medicine has of late made progress. It is sometimes advantageous to stand still and discuss whither one is going, instead of always seeking new ways. I do not intend to speak to you of the advance made in medicine by the discovery of anæsthetics or of the boon conferred on mankind by the development of antiseptic surgery. These subjects must be well known to all of you. I would rather refer to what advantage has accrued to medicine from some of the experimental and other work done of late years in physiology and pathology. It has been said that the true scientific worker investigates his subject, or ought to investigate it, without any view of its practical application; and it has been pointed out how frequently an apparently abstract and isolated piece of work bears fruit or has an application which was not in the worker's mind. It is quite true that scientific work should not be too utilitarian—should not always be done with the view of a practical application, since this would vitiate the disinterestedness with which it ought to be done. One may carry this idea too far, and it is not too much to say that a great deal of the work of recent years in physics and chemistry would not have been done at all, or at any rate not so rapidly, if there had not been a practical application in view. Medical science has advanced from the study of the structure of the body to that of the functions of the body; from the study of the structure and naked-eye appearances of diseased tissues to the investigation of the processes of diseases as they affect the functions of the body. From one point of view a diseased process must either be an alteration of the functions of the tissues or a poisoning of the body by agents introduced from without, or sometimes, indeed, formed in the body. In the investigation of a diseased process the anatomical changes are the most obvious and those most readily appreciated, yet they are from the point of view of causation of less importance than other changes which frequently occur before the structure of the part is altered to the naked eye or the microscope. Some of these changes are chemical and may be either an altered relation of the inorganic and organic salts of the tissues, or the formation from the organic elements of the tissues of substances poisonous to the tissue itself; or finally they may consist in poisons which have been introduced from without the body or manufactured in the tissues by a living organism which has entered the body. The investigation of these chemical processes has advanced our knowledge of medicine. Difficult as this subject is, and young as it is, it has still been of service and has in some instances indicated the correct treatment of disease. The chemical method of investigation is, however, not the only one which has been utilised in medicine. In disease as it is seen at the bedside we have to be content to study its process by clinical methods which are in many ways limited and which in the majority of instances throw but little light on the beginnings of disease. The examination likewise after death, although highly instructive and necessary in our study, is still very imperfect; for at that time we see disease in its final stage, when there are frequently absent the signs of the process that has taken place. What has been gained from clinical research and from work in the post-mortem room has been added to and consolidated by experiment; by, indeed, reproducing diseased conditions in order that the processes that occur may be studied in their various stages. In this way also the existing agents of disease can be more closely investigated and not infrequently discovered.

No better example can be adduced by way of illustration than the history of the thyroid gland. Until quite recently, like the thymus, pituitary body, and even the suprarenal body, it was looked upon as almost a curiosity; very useful for giving as a microscopical specimen in examinations. Its functions were unknown, perhaps denied. It was subject to disease and an experiment on a somewhat large scale by a surgeon, who removed the diseased gland in patients, led to the discovery that its absence produced a profound change in the nutrition as well as in the mental condition of the patient. This incidental experiment led to the investigation of the functions of the thyroid gland and to the discovery that its loss or disorder was associated with two diseases—viz., myxœdema and cretinism, in both of which there is profound and peculiar change both in nutrition and in the mental qualities of the individual. The final stage is as interesting, inasmuch as the implantation, the subcutaneous injection or the eating of healthy thyroid gland tissue or extract serves as a remedy for the diseases produced by the loss of the gland. The result attained is of great value; it began in an unconscious experiment and might perhaps have been finally obtained almost empirically, but it is doubtful if it would have been so rapidly worked out if this had not been the age of experiment, and if there had not been many eager workers ready to seize the clue to the elucidation of disease. Such an investigation as this leads to other work, some of which is good and some essentially bad. It led to the investigation of the functions of the other ductless glands of the body, one of which, the suprarenal capsule, is associated with a serious disease. Although important scientific results, especially regarding the suprarenal body, have been obtained, as yet no practical application has come. This may in time result as investigation proceeds. The subject, indeed, is a very wide one, affecting not only ductless glands but also those with useful secretions, such as the pancreas. Accurate observation and experiment may thus benefit practical medicine. We have now more appliances, better methods, and more numerous workers than in the last century for the study of disease, and with the increase of knowledge a certain amount of specialism must develop in order that the individual (whose capacity for work is but limited) may not be overwhelmed by the complexity of subjects. The mere accumulation of facts in morbid anatomy, the accuracy of which owing to the facilities for work it is open to everyone to determine, constitutes a great advance; it serves as a foundation for the study of the processes of disease. Important, however, as morbid anatomy is, too strict attention to it will not be of great aid; the object is to discover the agent or agents or the processes which have led to the anatomical changes in tissues or organs. For it cannot be too strongly stated that the more that is known of the prime causes of disease the more is it likely that measures will be discovered to prevent or counteract them. This is well illustrated by the advantages which medicine has obtained from the study of bacteriology. It is not many years ago since bacteria began to play an important part in the study of medicine. Investigated first almost solely from the biological side, their evident injurious effects when introduced into the body soon revealed a possible relationship to disease. By the development of accurate methods of study we now can, as we wish or not, obtain a given liquid full of bacteria or free from them. By research it has been shown that bacteria are not naturally present in the tissues of the animal body—a question which was discussed for a long time. By improved methods of isolation we can study each individual bacterium and observe its mode of growth and other peculiarities, study its life processes, and determine whether when introduced into the body it will kill an animal or not. For there are bacteria which are innocuous and those which produce disease, and of the latter there are some which will cause certain lesions in man and different lesions in animals, some that will affect one kind of animal and not another, and some that will affect both man and animals in the same way. All such facts have a bearing on the study of medicine. The importance of the development of bacteriology in medicine has been that it has explained infection; it has replaced the theory of infective disease by an array of facts. Its study and the results of its teaching have had, and will increasingly have, a profound effect on the progress of medicine.

Gentlemen, there are some diseases with which we daily come into contact which are hopeless and in which measures are only palliative and no permanent relief can be obtained. But that large class of diseases which are called infective, which occur in epidemics, and which pass from one individual to another are preventable, since they are caused by the introduction from without of a destructive agent. Not only are they preventable, but modern research has given some hope that they may be cured. These diseases cut off frequently in early life the healthy and the intelligent, those who would be useful citizens and who might by their intellect make the world brighter for their existence. I know no higher *rôle* for the medical man than that of preventing disease, and it is one which in the future, as regards these infective diseases, medical men will largely be called upon to play.

The infective disease is produced by a poisonous agent introduced from without, and it is because bacteriology has shown us the nature of some of these poisonous agents that it holds such an important place in modern medicine. Naturally before such agents were known, before they could be grown and their characteristics studied, but little was really understood of the means of preventing the diseases they produce. With the development of large towns the variety of infective disease has increased; with the increase of the human race and of domesticated animals the opportunity of infection has also increased, and even, indeed, the sources of infection. The difficulties, therefore, of preventing infective disease have also increased; there is hope that the means for their prevention will also increase.

The study of bacteriology in medicine has taught us the cause of tuberculosis or consumption, and if it had done nothing more this would be a very great stride. Because, knowing the destructive agent in so common and fatal a disease, means can be devised to prevent its entrance into the body. The history of tuberculosis is instructive as showing how precision in knowledge leads to practical measures. It was in the middle of this century that Villemin first, followed by Chauveau and others, demonstrated that tuberculosis was a disease which could be conveyed from one animal to another or from man to an animal; but it was not until Koch's discovery in 1881-82 of the bacillus tuberculosis as the cause of the disease that the pathological process became clearer. At the present time, therefore, it is not remarkable, knowing that this bacillus produces the disease, that precautions should be taken to destroy material, only too abundant, which contains the bacillus. So that it is a quite recent event that hospitals for consumption have taken the precaution of destroying the sputum and of preventing the accidental transference of the disease, and it is still quite recently that the ruling authorities have considered the advisability of regulating the food products supplied by tuberculous animals. It may be premature to speak of the prevention of this disease, which has existed for so many centuries and which had been accepted by the medical profession as an unavoidable disease; but as our knowledge advances and means are taken to destroy the sources of tuberculous infection I see no reason why mankind should not be, at any rate in part, relieved of this scourge.

The cause of other infective diseases has been discovered by bacteriological research, constituting the first step towards their eradication. Thus it has made definite our ideas about cholera; so definite, indeed, that it may confidently be hoped that in time cholera as a scourge of mankind will disappear. Improved sanitary arrangements and early bacteriological recognition of the disease have prevented its entrance into England and have greatly diminished its spread during the epidemic of this year in Egypt. Indeed, active measures, such as boiling the water, &c., stamped out the disease when it reached the army in the Soudan in ten days. Simply seeing and recognising the cause of these diseases is not the only fact that modern research has brought out. The active agents of the disease have been studied in various ways as regards their behaviour outside the body and inside it, with the result that the conditions of the body in which it can enter and flourish have been studied with fruitful results. Thus the ideas previously existing regarding the reasons why, for example, an infective disease should attack one person and not another exposed to the same infection have been made definite by the investigation of the causes and process of immunity and the resistance of the body to the invasion of disease from without.

Here, again, the idea of the body resisting disease is not new; but what modern research has accomplished is to test the idea by means of experiment, to determine the way in which the body resists disease, to discover the elements that fight against its invasion This path of investigation has become, perhaps somewhat unexpectedly, one of great advantage to practical medicine. It has been found, for example, that chemical substances are formed in the animal body which can enable an animal to resist the invasion of a disease which would otherwise be fatal to it. These "immunising" substances, as they are termed, are called into being by the action of the bacterial poison on probably the cell elements of the body. From these results it is but a step to the utilisation of these substances in the treatment of disease. In an infective disease the development of the infecting agent is slow, and it produces its effects and its fatal results by means of the poison it forms. If before this process has progressed far, before a fatal dose of the poison is already in the body, these immunising substances are introduced into the body, it is fair to suppose that they will stop the growth and deleterious action of the infective agent and thus aid in the cure of the disease. The practical application of this to cases of disease in man has given great hope that it will be a great aid in the treatment of infective diseases. A more extended investigation is required before the exact value of these substances to practical medicine can be determined.

Before leaving the subject of bacteriology it is necessary to mention the part that bacteriological diagnosis is likely to play in clinical work in the future. The bacteria which produce disease in man are specific; each causes its own peculiar lesions, many have their peculiar habitat. It is certain that as the characteristics of these individual bacteria become more known it will become a part of clinical medicine to seek for them in the diseases in which they occur. Inasmuch as the virulence of these bacteria varies, the discovery of any particular form will doubtless aid in the treatment as well as in the power of prophesying what will happen to the patient—i.e., in prognosis, as it is called. To take an example, there are various forms of bacteria which will produce effusion of clear liquid or of pus into the pleura, and it is undoubtedly of great value to know whether this effusion has been caused by the tubercle bacillus, by a streptococcus, by a staphylococcus, or by the pneumococcus, a condition which cannot always be told by the ordinary clinical means. Similarly the diagnosis of typhoid fever from other forms of intestinal infection in doubtful cases will no doubt in the future be aided by bacteriological means, and important light, both from a pathological and practical point of view, may thus be thrown on these forms of intestinal infection which produce so large an infant mortality. As regards the diagnosis of the various forms of acute inflammation of the throat, bacteriology has already been of great aid and has consolidated or elucidated the extensive clinical knowledge we previously possessed of such conditions. Although perhaps the most striking advance in modern medicine that has been made is in the nature and treatment of the diseases just considered—namely, those produced by micro-organisms—yet in nearly all branches the subject has progressed owing to the precision with which work has been done and to the numerous workers on the same subject, one man's work checking that of another; and it is certain that, aided by discoveries in physiology and in the physical and chemical worlds, not only the science, but the art of medicine, will steadily become more perfect. We are still far from perfection, as anyone who has the treatment and recognition of disease to carry out will readily admit. In any application of new discoveries to practical medicine great care has to be exercised, insomuch as all are apt to be carried away by enthusiasm in what appears at first sight to be a brilliant addition to our means of combating disease. Enthusiasm, to a certain extent, is a good thing, since without it perhaps no great progress would be made. But it is one of our safeguards that the enthusiasm of ideas or of laboratory work is apt to be damped by the cold judgment essential in the prosecution of the practice of medicine, in which the care of the life of the individual is in our hands. In clinical work, which means the recognition of disease and the care and treatment of the sick, the same methods of work are necessary as in scientific investigation—accuracy in observation and accuracy in record. Not only facts, however, are obtained in clinical research (and each patient examined may be considered as an individual investigation), but these facts have to be brought together, associated with other facts obtained by one's self, or part of the historical knowledge of medicine. The knowledge of all the facts of medicine will not necessarily make a man a good practitioner; for in the practice of medicine the study of human nature, its varieties and quips and fancies, plays a large part and lends indeed a great interest to our professional work. Each man, whatever the extent of his professional knowledge, has to undergo a personal development, during which he learns afresh the facts of his student days, building up his personal experience of disease. It is the building up of the personal experience, apart from mere knowledge, which more than anything gives the practitioner confidence in his professional work.

The medical curriculum through which you will pass or are passing may not be perfect, but it is the outcome of long experience and is designed not only to impart to you knowledge which is essential for your professional work, but to

serve as a mental training. The number of subjects you have to learn is almost appalling and the array of facts sufficient to cause terror. But, gentlemen, although you will not find that at the end of your student career you have remembered everything you have learnt, and while many details will go, the training of the mind in methodical and accurate observation will still remain if you use your opportunities aright; and during your student career the more formidable scientific work is tempered by the pleasing responsibilities of clinical work, during which for the first time you come in contact professionally with the sick. When you enter practice, as I hope you all will, you can all become investigators, for if your training has been good you can become patient and careful in your responsible work, and none can tell when the opportunity may arrive to him to add some stone to the temple of knowledge and thus aid in the progress of medicine.

Abstracts
OF
INTRODUCTORY ADDRESSES, ETC.,
DELIVERED AT THE
LONDON AND PROVINCIAL MEDICAL SCHOOLS
AT THE
Opening of the Session, 1896 97.

ST. GEORGE'S HOSPITAL.

INTRODUCTORY ADDRESS BY MR. W. ADAMS FROST.

[AFTER a few words of welcome to the students and reference to various changes in the hospital Mr. Adams Frost said:]

"You commence to-day the study of a profession, and I suppose each of you has asked himself the question, What sort of a career does medicine offer? and that you have answered that question in some sort. But although this is an important question for you, there is another of much greater importance to the profession and to the public—namely, What sort of man are you who propose to join the profession? For it is obvious that every year a large number of men enter as medical students who are utterly unfit to be medical men. That this is so is shown by the large proportion of rejections at examinations. Of course, it may be said that this only proves the inefficiency of the examination test. But this can hardly be so. It must be remembered that the majority of examiners are teachers in the medical schools of the subjects in which they examine. As teachers their great aim is to impart such knowledge as shall enable the student to pass. As examiners their aim is not (as is often supposed) to discover something that the candidate does not know, which would be a simple task, but to find something which he does know, a matter sometimes of insuperable difficulty. Yet the qualifications required to pass an examination are not of a very high order—a moderate capacity for work, some common sense, and a capability of inwardly digesting and assimilating a portion of the knowledge that is nowadays crammed into the student as if he were a prize goose. Unfortunately, some men have absolutely no capacity for work, have no common sense, and cannot digest knowledge. Some of these are weeded out at the preliminary examination, probably not nearly as many as should be. Until the Society of Apothecaries in 1855 instituted an examination in arts no standard of general education was required. If this society had done nothing else it would deserve the gratitude of the profession for instituting this reform. A certain standard of general education is necessary for a medical man, and I think the standard might well be raised, not merely because the status of the profession would thereby be improved, but also because by that means we should weed out many who, having shown that they have no capacity for learning as boys, are not likely to develop it as men. A few men, despite the opinion of the examiners, apparently consider themselves unfit to practise. Some of these join the army and then endeavour to inflict the wounds which it was their earlier ambition to heal. Others join the Church, apparently considering a cure of souls will suit them better than the cure of bodies. In every profession there are men who are unsuited to the calling they have selected, either because they were ignorant of the qualities required or they misjudged their own characters, or perhaps they have joined a profession for which they have neither aptitude nor liking for family or other reasons. For example, some men cannot make good surgeons, for they are devoid of manual dexterity. I do not wish to overrate the value of the mechanical part of surgery; the surgeon, whose chief attribute is mechanical skill, had better be a mechanic, but a certain degree of manipulative skill is essential, and was never more essential than at the present time. It is true that before the days of anæsthetics brilliancy and rapidity in operating were more prized than now, but the operations performed for the most part followed definite lines and presented little variation. A surgeon of any experience would, therefore, soon become expert at their performance. But the range of operative surgery has been widened at an ever-increasing rate, first, by the introduction of anæsthesia, then by the adoption of antiseptic methods, and we cannot doubt that it will be widened much further as soon as we are in a position to profit fully by the action of the Roentgen rays. Every development of surgery which opens fresh regions to the surgeon's knife demands from him a higher degree of skill. For it is in the modern operations that skill tells most. A clumsy amputation or circumcision may be longer in healing, but eventually a good result is generally obtained. But in an abdominal operation the patient's life may be sacrificed to a bleeding point overlooked, to a suture improperly applied, or to a slight carelessness in manipulation. Much of our clumsiness is due to the ridiculous custom of teaching children to do everything with the right hand, a relic of pagan superstition that cannot too soon be abolished. Every surgeon would operate better for being ambidextrous, and for some operations it is necessary that he should be so. Alas! how many are ambisinistrous, and such must be content to be physicians. If the physician need not indeed possess manual dexterity he requires mental qualities of a high order. As a rule he has to base his conclusions upon data which are much less complete than those available to the surgeon. The early history of medical cases depends largely upon the statements of the patient or his friends. It requires no little skill and judgment to choose between them when they are conflicting and to appraise the relative value of facts which appear to tend towards opposite conclusions. The supply of consultants, however, will always exceed the demand, and the great majority of men will therefore go into general practice. What, then, are the qualifications necessary for general practice? The public having little opportunity of judging of a man's ability naturally attach importance to other points, and there are consequently defects in character and manner which, if they do not prevent a man from being successful in practice, at any rate, handicap him considerably. I do not refer to the want of what is sometimes called a professional manner; the manners of a medical man should be those of a gentleman, and if he does not possess them the adoption of an artificial manner will only make the fact more apparent. A defect which is serious in any medical man, but doubly so in general practice, is a want of sympathy. I do not mean by the term any morbid sentimentality, but that ability to see matters from the patient's point of view which alone can obtain his confidence. The severity of hospital cases as compared with those met with in private practice is apt at first to make one look upon the latter as trivial. There is no word that rankles so much in a patient's breast as that little word *only*. That which appears trivial to us may seem very serious to the patient, and it should be borne in mind that sane persons do not, as a rule, go to the expense and trouble of consulting a medical man for mere pleasure. It is the failure to recognise this fact that drives patients to seek the advice of quacks, qualified or unqualified. Again, the man who talks much about his patients will soon not have many to talk about. The rule for a medical man should be to communicate nothing about a patient to a third party without the express leave of the patient. In the case of those who are really public characters the public consider that they have a right to some information, and custom has provided a safety-valve in the form of a bulletin. Knowledge and ability are essential for a practitioner, but more important than knowledge is the faculty of acquiring it

from experience. Some men seem to start with a certain stock of knowledge, which steadily diminishes till it almost vanishes. In another man knowledge is a living organic thing, developing and growing by experience; like everything that is organic it must decay and die, but it may first let fall some germ of truth, from which in future ages may be evolved results of lasting benefit to the human race. It is just a hundred years ago since a practitioner in Gloucestershire discovered such a truth; that man had been a pupil of St. George's hospital and his name was Edward Jenner. Jenner belongs to all time and to all mankind, but it is surely most fitting that we should at this time remind the world of his connexion with this hospital and school and record the fact in some permanent manner for future generations. At present the sole memorial of Jenner possessed by this hospital is a bovine hide, which is said to have belonged to the cow from which he made his first successful vaccination."

[Mr. Frost here gave an outline of the early history of vaccination; he continued:]

"The days when Jenner lived were not days of great publicity, nor was it then the custom for medical men to write magazine articles on medical subjects. Consequently Jenner was able to mature his discovery and to present it to the world as perfect in all essential respects as it has since remained. In the present day it is different. One of the first scientific men in Europe makes a discovery which is of great interest and may have a great therapeutic value. Immediately intelligence is flashed throughout the world that a cure has been discovered for a very prevalent and often incurable disease. Thousands of invalids (totally unfit to endure the hardship of travel) rush to the spot only to find that the seed has indeed been sown, but that the harvest is not yet. But there is a bright side to our modern methods of investigation. We are gaining an insight into the nature of disease, and to have good information about your enemy is half the battle. Already the road indicated by Jenner has been partially explored by others, among whom the names of Lister, Pasteur, and Koch stand pre-eminent. It is reserved for you to discover whither it leads."

THE MIDDLESEX HOSPITAL.

INTRODUCTORY ADDRESS BY DR. W. ESSEX WYNTER.

THE following is an abstract of the address delivered by Dr. W. Essex Wynter:—

After a congratulatory allusion on the occasion which had brought together the friends and students of the hospital and a special expression of pleasure at the *réunion* of old friends and former comrades in the well-known precincts of the medical school, Dr. Essex Wynter briefly reviewed the course of study, recommending those who were there for the first time to make no delay in entering upon the work which lay before them on account of the difficulty in focussing their first efforts, assuring them that as many of the subjects in the curriculum were mutually inter-dependent, and, circle-like, presented no salient point, it mattered little where they were first attacked, adding that many not recognising this wasted valuable time in search of a "loose end" which did not exist. He also advised them to make themselves familiar as speedily as possible with the several departments of the hospital and medical school, so that they might the sooner get over the sense of strangeness and novelty which was in many ways a serious obstacle to receptive attention. He warned them against the necessary effect of methodical teaching in developing too much uniformity in opinion and method, and encouraged them to assert their own individuality as early as possible. He alluded to the rapid multiplication of books in modern times and the increasing tendency that existed to go to them for information which should be gained at first hand by direct observation, describing as artificial and spurious, ideas gained from mere verbal descriptions, and suggesting that books should be used to complete and coördinate knowledge previously obtained by practical work. In taking notes he advised the brief outlining of a definite idea by a few words or a rough diagram without attempt at elaboration, asserting that the value of notes to the person who made them was generally in inverse proportion to their bulk. Summing up the foregoing recommendations he insisted upon the prime importance of devotion to practical work during the hours spent within the walls of the Middlesex Hospital, which was peculiarly fitted to supply exceptional advantages as a field for clinical study. The lecturer suggested that his hearers should consider themselves as looking forward to a long expedition and of having the opportunity then of providing themselves with what they would need by the way, knowing well that whatever they neglected they would suffer for by-and-by without being able to make good the deficiency. Curiosity, he observed, was mental appetite; when it was aroused the utmost advantage should be taken of it to get a full and clear impression of the subject which excited it and to gain as much information as possible under its stimulus. Those things which really interested them at the moment would be readily understood and remembered without effort.

Dr. Wynter then passed on to the main consideration in his discourse. Omitting further allusion to those technical studies which would claim most of their attention and at least a quarter of each twenty-four hours, he asked his hearers to give thought to the important period they were called upon to devote to the acquisition of medical knowledge, which comprised the years of highest educational value in their lives. Hitherto, he said, they had been training their minds to comprehend and remember, acquiring habits of application, attention, and reasoning; henceforward their aim must be the acquisition of knowledge and skill, not merely as an exercise, but for their use in the interests of others. These years corresponded with those usually spent at a university, they covered the transition from youthful dependence on the guidance of others to freedom and the assumption of more than ordinary responsibility, they included the principal period of moral, intellectual, and physical growth, and had much influence on future social standing. It would not be enough that they should leave the hospital with the information and training they brought from school, together with a certain amount of medical knowledge. They must develop their senses to a degree beyond what would suffice for ordinary life; they had to acquire manipulative skill and cultivate the capacity for deliberation and prompt action in the midst of disturbing circumstances; and, above all, their experience should supply them with a habit of patience, kindliness, and tact, remembering that—

> "We are not ourselves
> When nature being oppressed commands the mind
> To suffer with the body."

In few words, they should learn to relieve the individual, not merely to diagnose and remedy the disease, and so apply that quotation from Maro which they might have appropriately read as they entered the medical school—"Miseris succurrere disco." They would then appreciate to the full that famous first aphorism of Hippocrates—"Life is short, art is long, opportunity fleeting, experience delusive judgment difficult. It is the duty of the physician not only to do that which immediately belongs to him, but likewise to secure the coöperation of the sick, of those who are in attendance, and all the external agents." Outside their immediate studies, which with the best intentions would be found to consist in chronic strain with not infrequent acute crises of anxious pressure at the time of examinations, they must find leisure for recreation and exercise such as would counteract the effect of their application in the hospital and could in nowise be dispensed with. For—

> "Sweet recreation barred, what doth ensue
> But moody and dull melancholy,
> Kinsman to grim and comfortless despair?"

They must not forget that at this time they were building up a constitution that must carry them through many years in which they might have few opportunities for considering their health. It was only in youth also that they were likely to develop those accomplishments and hobbies which would furnish them with the means of agreeable recreation in later years. They were much to be congratulated in this respect in having London for their place of study. Certainly no other place could supply such a field for medical observation and practice or furnish such opportunities for recreation and mental improvement. To reside in London for five years was, indeed, an education in itself. Later, when the demands of teachers and examiners were satisfied and text-books were restored to their shelves, as graduates they would come to deliberate as to how and where they should find suitable fields for the exercise of their newly acquired powers. First they would confirm their knowledge and extend their experience by a period of residence as medical officers in their own and other hospitals, where they would have the incalculable advantage of

encountering their difficulties and achieving their first successes under the eyes of those most keen to appreciate, sympathise with, assist, and instruct them. Few men who passed from school to hospital and from hospital direct to the routine of practice failed before long to feel oppressed by the continual strain of responsibility, which once begun could not be broken through, and often too late they longed for an opportunity to get beyond the narrow limits of their daily round. In this interval, then, between the period of hospital work and the commencement of practice occurred the opportunity for travelling, which was another important factor in real education, and he had no hesitation in recommending those who met with the opportunity to embrace the occasion for seeing something of the world. It was only in early years that they could hope to spare time for long journeys, and it was then they were of most value, furnishing an opportunity of being brought into contact with strangers and of having to rely entirely on themselves in emergencies, thus cultivating self-reliance and resource and affording an admirable corrective to that too ready deference to authority and tendency to act in concert with, or under the guidance of, others which was the natural effect of their first years of training. Such experience and the temporary absence from accustomed sources of information wonderfully extended and intensified interest in professional work, and showed how far their knowledge was really their own, so supplying an incentive to further and more independent study. They would be fortunate if at this time they could visit some of the continental schools, to familiarise themselves with foreign literature, and review their work from the new standpoint. After such an experience they might peruse original medical works with advantage, reading, as Bacon said, "not to contradict and confute nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider." There was one other point which was of importance in connexion with general education. It was a widely accepted statement that medical men as a body were bad men of business; to this, more than to the lack of ability in professional matters, could be traced want of success in many instances. Their life, indeed, was an exposition of altruism in its most intimate application, and did not accustom them to a habit of self-interest, nor was their calling one that could be carried out in a strictly methodical manner. Though these considerations might serve to explain the absence of conspicuous business qualities, and might even be taken to assume a distaste for them, it could not relieve a medical man altogether from the responsibility of carrying on his extra-medical duties in a way consistent with the usual dealings of educated men or excuse him for want of order and exactitude in public and private affairs. Some attention to these matters was therefore essential before commencing practice. There were many directions in which the exercise of their professional knowledge might lead, and whatever their lifework might be it could not fail to be influenced for good by so broad and humanising an education. To quote from Sir Thomas Browne's "Religio Medici":—"There is a philosophic spirit which is far more valuable than any limited attainments in philosophy; and the cultivation of which, therefore, is the most precious advantage that can be derived from the lessons and studies of many academic years; a spirit which is quick to pursue whatever is within the reach of the human intellect, but which is not less quick to discern the bounds that limit every human inquiry, and which, therefore, in seeking much, seeks only what man may learn, which knows how to distinguish what is just in itself from what is merely accredited by illustrious names, adopting a truth which no one has sanctioned, and rejecting an error of which all approve, with the same calmness as if no judgment were opposed to its own; but which at the same time, alive with congenial feeling to every intellectual excellence, and candid to the weakness from which no excellence is wholly privileged, can dissent and confute without triumph, as it admires without envy, applauding gladly whatever is worthy of applause in a rival system, and venerating the very genius which it demonstrates to have erred."

ST. MARY'S HOSPITAL.

INTRODUCTORY ADDRESS BY MR. MORTON SMALE.

[AFTER a few introductory remarks Mr. Smale said that the givers of opening addresses had been urged by the press to address the public rather than the students, therefore he was going to say something about patent or proprietary medicines. After giving the clauses of the Stamp Act as applied to proprietary medicines he continued:]

"Any one of these conditions alone entails liability to Stamp Duty. It will be evident, therefore, that although a patent medicine must have a stamp the patent is not a necessary condition. The condition is that it must be, or must have been, recommended to the public as a proprietary medicine, or as a specific, or as having a secret—it may be an occult one—attached to its preparation. One of the peculiarities to be observed here is that it has to be recommended to the public, but by whom it is to be so recommended the conditions are dumb. The person or persons who recommend—to this I call particular attention—may be entirely ignorant, not only of the specifics or cures which they prescribe in a wholesale manner, and of the nature, or source, or course, or sequelæ of the diseases which are to be prevented or cured, but are also utterly ignorant of the complex human tenement which carries the disease. Whatever else their knowledge may be, whether it be limited to the laws of profit and loss and a good balance sheet, or to the glorious mendacity and effrontery of quack advertisements, or whether it includes in its grasp all that has been taught of anatomy and physiology and all that has ever been or can be known of medicine and surgery and the action of drugs, we may rest assured they can never know the circumstances surrounding the sufferer, or anything of the mental or physical conditions accompanying the disease for which the specific or cure is sold. Thus, gentlemen, while the members of the medical profession may not possess a secret anything which would in any way benefit suffering humanity, and while the unqualified assistant may not (rightly, I think) act but under the strictest surveillance, the humbug may distribute his wares broadcast, fortified by all the glory of a Government Stamp. I say fortified advisedly, for we all know the spurious value which is attached—not only by the so-called ignorant classes, but by many who might be expected to know better—to the revenue label."

[He next referred to the idiocy of the public in treating themselves, or rather in allowing themselves to be treated, by the makers of proprietary medicines and to the enormous sum of money annually wasted upon quack medicines. Turning from the public he then addressed the students, saying:]

"Notwithstanding that you must be weary of listening to me I feel I must devote a few minutes to ourselves. It may seem to many of us who have come again and again to our opening addresses that the whole thing is stale and ought to be abolished; this appears to be a selfish view of the case. Time was when the eldest of us was in his small years represented by the lowest single numerals, when all was fresh and real, and when both past and future were swallowed up in the ever-moving, ever-changing present; and it is for those who are to-day, as it were, on the threshold of their career that our opening addresses are made, and to them they are offered, and I feel that to-day I have sacrificed my young friends to the Moloch of public opinion. I do not think much is to be gained by sketching out for our students in these addresses the course they should pursue in their studies, or the method that they should follow in fixing or utilising the knowledge they are expected to acquire. The different courses of instruction are arranged, so far as may be, to follow each other in such a sequence as shall be most advantageous to the student, and if there be a danger in our modern methods I should say it was to be found in the over simplification of learning. Everything is done for us and is made intelligible to the meanest intellect, but the facts thus made understandable to us must become our own and be stored up in our own brains to be brought into use as occasion demands, and such a storage is only to be made by careful and painstaking perseverance and study. During many years' experience as a dean I find that working men generally find out the methods or plans that suit them best; they are various, but all more or less the outcome of industry, and the man who has not this faculty may at once be left alone to his idols. The inaugural address that could change the idler into a worker has yet to be written. It is as true to-day as when it was written, that idleness is the root of all evil, and that idle hands will always find mischief to perform. A medical student has no time to be idle, and consequently he must be thorough in his work for his brain's sake and thorough in his play for his body's sake. As

for the idler, send him to Coventry, lest by his influence one of you should slip into ways of idleness. It is invariably this idleness that makes men a disgrace to our common humanity, that converts them into the loafer about billiard-rooms, and the gambler, and may be the drunkard. I should say that the greatest danger against which a student has to guard is the prevailing habit of betting. I have not time now to enter into the merits of the question, but this I know, that betting and gambling, in my experience, have been the cause of the ruin of more students than all the other vices combined. It has converted men of honourable parentage into thieves and liars. At this moment I know of a student who obtained from his father the fee for an examination for which he did not intend to present himself; the money was used, and a few days after the examination he wrote to his father saying he had failed. Gentlemen, that man was a liar, a thief, and should his father hear of it he might even be a patricide, for parents' hearts are often broken by their offsprings' disgraceful conduct. We must all, in the ordinary course of events, incur certain obligations in life; there are debts which we cannot avoid contracting and which we can never repay—debts to our parents, our relations, our friends; aye, and to our teachers. Standing as I do to-day in the presence of many who have been my teachers, I can with all honesty and truth say that. Moreover, there are the debts to our enemies; these, perhaps, it is undesirable we should repay, for do we not measure our own hope of forgiveness by what we forgive? As to money debts, I need hardly say a word about these; there are some that are excusable, but they are very few, and the majority of pressing obligations incurred by young men are, I do not hesitate to say, in themselves immoral, and too often have their origin in immorality; such being the case, it is quite unnecessary for me to say a word to the students of St. Mary's Hospital on such reprehensible conduct. Yet I say, do not get into debt. Let me admonish you seriously on this point; it admits of no concessions, no mitigation, no exceptions; the results are invariably the same. Let *me*, then, repeat it, never draw a bill on Time. This old gentleman is a great usurer; he will advance you whatever you like to take, you may draw upon him as you will, but depend upon it he will be inexorable in his exaction of payment. Reflect seriously that you cannot duplicate a moment of your lives. Far be it from me to say you are to be perpetual slaves of your circumstances, that you are to work and work, and ever work. Many of you know to the contrary, and that your teachers are most hearty advocates for amusement and recreation, and there is not one among you prouder of your achievements in the athletic field, and which has enabled us to have this handsome shield in our library, than those sitting upon this platform, and their pride is materially increased when, as so often is the case, the best athlete is the best student; but do not delude yourselves and imagine that every man may take the same amount of play any more than that every man need do the same amount of labour to accomplish the same amount of work. This measuring of your mental and physical strength and apportioning your periods of work and play, rest or leisure—or whatever you may term it—will be the true test of your intelligence during your studentship; remember that the object for which you have come here is at its minimum to become a qualified practitioner; to this let more come if it will, but less there must never be, otherwise you will have become a bankrupt of Time, a bankruptcy from which you can get no discharge; do not, therefore, get behind with your work and delude yourselves that you can make it up by-and-by. By-and-by will have its wants and preoccupations as surely as the present, and if you cannot fulfil your obligations now you will not be able then, and most certainly will you be unable to fulfil the additional ones you may incur by putting off till to-morrow what should be done to-day. The man who at the end of any section of his studies may, by a supreme effort, make up leeway is not regaining time, he is only using up the time for one purpose which could have been employed for perhaps a higher and more advanced and more important object. A few more words and then I will weary you no more. Many of you will shortly be qualified and will go out into the world to practise honourably your profession. In your intercourse with the public and with your professional brethren you will meet difficulties and temptations innumerable. The temptation to get rich in a hurry may lead men to discreditable actions to their patients. Want of courtesy may at times be meted out to you by those whom you may be endeavouring to serve to the best of your ability. Some question of medical ethics may disturb your peace of mind. You may be asked to write testimonials for patent medicines or drinking waters or what not in order that you may be advertised. Whatever the trial may be there is one course of action only open to St. Mary's Hospital men—indeed, to every medical man. Let the words of one of England's greatest authors express my meaning. Thackeray says in his ballad, 'The End of the Play'—

> "'Come wealth or want, come good or ill,
> Let young and old accept their part;
> And bow before the awful will,
> And bear it with an honest heart.
> Who misses or who wins the prize,
> Go, lose or conquer, as you can;
> But if you fall, or if you rise,
> Be each, pray God, a gentleman.'"

SHEFFIELD SCHOOL OF MEDICINE.

INTRODUCTORY ADDRESS BY SIR HENRY LITTLEJOHN.

SIR HENRY LITTLEJOHN in giving the introductory address at this school took for his subject "The Provincial Schools and their Special Advantages." He pointed out the important part that they were destined to play in the education of the student. In fact, these schools supplied what was lacking in such crowded teaching centres as Edinburgh, London, and Dublin — namely, that personal superintendence by the teacher of his pupils' studies whereby the deficiencies of the student were ascertained, his faulty habits of study corrected, and a healthy stimulus was communicated which lasted him through his whole curriculum. It was, in truth, a revival of the old system of pupilage without its disadvantages. Now the comparatively small numbers attending the provincial schools afforded unusual advantages in putting this system to the test, while there could be no doubt that, so far as the *morale* of the student was concerned, this close companionship of teacher and taught could not fail to strengthen good resolutions and beget that *esprit de corps* which was the very essence of professional life. It was impossible to attain these advantages in a crowded school. The professor knew comparatively little of each student, and those who demanded the closest surveillance and the greatest assistance in their studies if they were to be saved from making shipwreck of their life escaped the healthy magnetism and control of an energetic teacher. It was only the few who specially attracted his attention by their intelligence and thirst for knowledge that obtained the benefit to be derived from contact with a nobler nature. But, in addition, the provincial schools presented material advantages of the greatest importance in medical study. Possessed of ample opportunities for clinical instruction in their large and well-appointed hospitals they contrasted favourably with those seats of learning where it was found impossible from their comparatively limited hospital accommodation to afford pupils that thorough acquaintance with disease in its clinical aspects without which it was impossible for a young man to enter satisfactorily on the practice of his profession. This very year the General Medical Council had made attendance on the practice of lunatic asylums, of hospitals for diseases of children, for infectious diseases, and for diseases of the eye compulsory. How was it possible in any great school to give the student satisfactory instruction in these most important subjects? The very numbers forbade it. It was otherwise in a provincial school like that of Sheffield, where alone the student could obtain, so to speak, bedside practical tuition in all these departments. No doubt this action on the part of the General Medical Council was tardy; but it must be remembered that it was only of late that our hospitals throughout the country had attained marked efficiency. At the same time the student had just cause of complaint, as he was liable to be examined on these topics while he was denied the opportunities of becoming practically conversant with them. Now all had been changed, and the curriculum of medical study must be so altered as to admit of his fully availing himself of all these sources of practical instruction. But to enable him to do so satisfactorily he must have recourse to the provincial schools, which offer special inducements in all these important subjects. There was at the same time little

fear of the great schools suffering from this competition. They would still have sources of attraction from the special advantages which they undoubtedly present, and while the number of entrants might undergo some diminution, their post-graduate courses, their lavishly-equipped appliances for research and the fame of their professors would bring to them the young graduates from the provincial schools who desired to complete their education before entering on practice.

Illustrations were drawn from the past history of the great medical school of Edinburgh, culminating in the establishment of an extra-mural school, now called the Medical School of the Royal Colleges of Surgeons and Physicians, the chief function of which was to supplement the teaching in the University. This was mainly owing to the enlightened action of the Corporation in whom at first the patronage of the University chairs was entirely vested, but the regulations then laid down were fully recognised in the New University Act. This outside school had no fewer than sixty-five independent lecturers and was believed to be the largest of its kind in the world. Its free constitution, its method of election to vacant chairs, and its welcoming all comers to assist in teaching without any restriction as to the school in which they had studied were all commented on as bearing on the provincial schools, the success of which depended so much on the strength of their professoriate. They had now become important factors in medical education, and it behoved them to avail themselves of every means of attracting students. It might be supposed that such a busy hive of industry as Sheffield was unfitted for academic quiet and study. But there was this compensating feature, it was the scene of mighty industries which supplied in the numerous accidents which almost necessarily attended their processes unusually complete instruction in the minor and major operations of surgery, which to the general practitioner, often left alone to cope with injuries of all kinds, must prove of invaluable service.

Finally, allusion was made to the handsome endowment left to the school by Mr. Jackson, the late lecturer on surgery, and it was pointed out how important it was that millionaires should consider the claims of the provincial schools to share in the enormous accumulated wealth of the manufacturing towns. All the chairs should be endowed so as to enable these schools to compete with the universities which had inherited large sums of money. No better investment could be made, for whatever tended to improve the teaching of provincial schools directly promoted the public weal, and the richer citizens by such benefactions not only contributed to their own freedom from disease, but procured for their poor brethren that assistance and those medical comforts which would otherwise not be available for them.

YORKSHIRE COLLEGE, LEEDS.

INTRODUCTORY ADDRESS BY MR. VICTOR HORSLEY.

[THIS address was delivered on Oct. 1st. In the opening passages Mr. Horsley explained the advantages and disadvantages of guilds, mediæval and modern. He then called attention to the superlative importance of chemistry in the study of physiology and pathology and continued:]

When you enter into practice you will sooner or later find that there are innumerable adverse circumstances which narrow your field of work, and which, if not dealt with, may seriously affect your prospects and your income. You may discover that one of your neighbours is directly or indirectly cutting into your work by unethical means; you may have an agent of a so-called medical aid society come to you and threaten to flood your district with touts, who will persuade your patients to take the cheap and nasty advice of the miserable man who has sold his services and his honour to such an infamous society; you may have unwittingly offended someone in the district and find that he is going about tale-bearing and indulging in petty slanders about you and your professional abilities; or you may realise that someone is employing an unqualified person to practise among the public. What means of redress have you as individuals to avert or stop these evils? Practically none. What can you do? The answer is very plain. Combine with your fellow practitioners and build up a guild or an association which shall have all the advantages but none of the disadvantages of the old mediæval guilds. You will have brought against you at once the accusation that you are trying to found a trades union, but this accusation is only an invention of persons who are so secure from personal injuries of the kind I have mentioned that they have become quite selfish and indifferent to the struggles and difficulties of their fellow workers, and who, even though made aware of what is urgently required, are capable of using all their influence to hinder and injure combinations of the kind I am now advocating. The difference between such a medical combination as I would advocate and a trades union is that the trades union is founded solely for the benefit of the members of the union, and does not punish its members who are guilty of what we know as infamous conduct, and therein lies a fundamental difference between a trade and a profession. In a profession the common feeling of uprightness is, of course, a constant and very potent instrument for the prevention of evil-doing, but the good opinion of their fellows is not enough for some undesirable individuals, and so each profession has acquired powers under the legislature to enforce a discipline of propriety. The medical profession as a whole has enjoyed this power of governing themselves ever since 1858, when the Medical Act was passed—i.e., thirty-eight years ago; and it is a very remarkable instance of British devolution of central government that the legislature constituted a General Medical Council out of members of the profession and placed absolute ruling power in the hands of that body. No such disciplinary body exists in regard to any trade or any trade union. At the present time the question as to how the profession may best combine together to resist common injuries is, in the process of evolution, being answered in a very satisfactory way, of which the conclusion of the recent dispute at Liverpool is a very striking example. The British Medical Association, which is the largest and most successful medical association in the world, has grown into the position of practically representing the profession. Much has been said to the effect that medical defence is beyond the original scope of the Association, and that the latter was intended to be a purely scientific body, but this view is quite erroneous, the memorandum of association providing for the material interests of its members as well as for the furtherance of medical science. Whatever may have been the defects of the administration of medical defence in the past, these defects have now been solved by the Council of the Medical Defence Union, whose extensive experience shows quite definitely that medical defence work may be successfully accomplished with a relatively small expenditure, and that the greatest bugbear of all—viz., the hypothetically enormously expensive case—is so unlikely to arise as not to bring it within the field of practical politics. Personally, therefore, I believe that if the Association conduct the work as suggested entirely on the lines of the Defence Union the profession will gain immeasurably by having the prestige and numerical strength of the Association to use as a weapon especially in the direction of putting an end to any intended bogus legal proceedings at the very outset of their being undertaken. One of the disadvantages which may attend combination and medical defence is the fact that some of the appeals made to the Defence Union are from members who have got into dispute with their professional brethren, a misfortune which is very often due to a certain want of care in arranging the conditions under which our work is to be carried on in private association or partnership. As far as possible professional disputes ought to be settled by arbitration, the arbitrators being men high in the profession and of known judicial capacity. If one of the parties is not actuated by worthy motives he will not abide by the decision of the arbitrators, or, indeed, enter into an arbitration, if there should be any penalty binding clause to compel him to faithfully carry out what he has consented to. For a case like that there is no redress but an action-at-law.

While speaking of mutual defence against attacks from both outside and inside the profession I must, of course, say a word on the prevention of quackery. Most people appear to imagine that the medical profession have selfish ends alone to subserve in stopping the wicked practice of quacks, but this is not so, for the Medical Act of 1858 was chiefly constructed, as its preamble shows, for the direct protection

of the public by the simple process of stopping quackery. A quack is an unqualified practitioner of medicine or surgery—i.e., a person posing as a medical man, although his name is not on the Register. There has grown up, owing to the remissness of the authorities of the General Medical Council, a kind of understanding that if a man possess a registrable diploma or degree he can *ipso facto* practise. This is not the legal position, for the Medical Act, 1858, Section 32, clearly states that the term "duly qualified medical practitioner" shall mean only a person whose name is on the Register, and the Penal Section 40, under which the prosecution of quacks can be undertaken, distinguishes the former from a quack by proof of registration, so that it is quite clear from a study of the complete Act that if an individual practises as a physician and surgeon without his name being upon the Register he should be convicted under Section 40. These are very simple matters of fact, and yet when a flagrant case is submitted to the courts it is curious what difficulties seem to at once suggest themselves to the legal mind.

[Mr. Horsley, after commenting on the cases of Bridgewater and Frickhardt, referred to the deceptive methods of unqualified practitioners who described simple tumours as cancers and treated them with caustics. He pointed out that "unqualified practice" does not mean amateur assistance in illness, but the practice of medicine or surgery for gain. He continued:]

Finally, there is one way of stopping quackery which the Medical Defence Union has found of much public service, but which is very difficult of execution in the worst forms of quackery because people will not submit to the unpleasantness of having their private affairs discussed in the witness-box. That method is for the patient to sue the quack for the recovery of the fees that he was deceived into paying him. In the case of the notorious hernia quack Sherman the Union have succeeded, under the local direction of Mr. Walter Whitehead, in driving him from the country by this means, and our writs are out against him in case he should return. Unfortunately, however, as a rule people are too much ashamed of having been victimised to courageously sink their personal feelings in the interest of the public at large; but it cannot be too widely made known that the county-courts are always ready to help people to recover their property and to compel the quack to disgorge his ill-gotten gains.

INTUBATION *VERSUS* TRACHEOTOMY IN DIPHTHERIA.

BY T. H. KELLOCK, M.A., M.D. CANTAB., F.R.C.S. ENG.,

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CONSIDERABLE controversy has taken place at various times as to the respective merits of tracheotomy and intubation of the larynx as a means of relieving dyspnœa due to laryngeal obstruction, and apparently the general conclusion arrived at, in England at any rate, is that whereas in obstruction due to acute inflammation, whether this be of a simple nature or caused by scalds, &c., or a complication of measles, intubation of the larynx by O'Dwyer's method may have a good chance of being successful, yet when the inflammation is due to diphtheria, on the whole tracheotomy is to be preferred, and amongst the chief objections that have been raised to intubation are the following, namely:—(1) that the tube causes ulceration in the trachea and about the upper opening of the larynx; (2) that membrane cannot be coughed up through the tube; (3) that the patient has to breathe air which is constantly passing to and fro over the diseased surfaces; (4) difficulty of performance and danger of pushing a piece of membrane down which may block the trachea; (5) dangers of nursing; and (6) the unsatisfactory results that have been obtained hitherto. These objections were, however, all made before the antitoxin serum was introduced as a means of treating diphtheria, which has proved of so much benefit, that having it at our disposal we may review and modify to a great extent these objections to intubation.

It must have occurred to many who have watched the progress of cases of diphtheria when treated with antitoxin serum, and noted the rapid way in which, after the first twenty-four or thirty-six hours, the membrane melts away, that in cases where the larynx is affected sufficiently to cause difficulty of breathing, if only these first twenty-four or thirty-six hours can be tided over the necessity for tracheotomy may be altogether avoided, and the means for thus tiding over this period we have in many cases in intubation. The necessity for some quite temporary means of this sort is made more apparent by those cases, which occur with some frequency, when with very often a good deal of membrane about the tonsils and pharynx the patient has a little difficulty of breathing, a little stridor, and some slight recession of the lower intercostal spaces, indicating a slight implication of the larynx, but not sufficient to necessitate any operative interference. Such a patient is treated with the usual remedies and watched rather anxiously; he is injected with antitoxin serum, and for the first twenty-four or thirty-six hours all that can be said of him is that he gets no worse; after the lapse of that time, however, with probably a second injection of serum, a marked improvement takes place, the respiratory difficulty becomes much less or disappears, the throat begins to assume a more healthy appearance, and the necessity for operative measures has gone.

Considering, then, first the objection raised to intubation on account of the ulceration in the trachea and at the upper opening of the larynx which may be caused by the tube, it must be allowed that this may occur to an alarming and dangerous extent, as instanced in the cases recorded by Dr. Turney.[1] Very much the same thing happens in the trachea after tracheotomy when a metal tube is used. The danger has been obviated here to a certain extent by the use after the first forty-eight hours or so of the softer Morrant Baker tube, and it does not seem too much to hope that at some time we may be able to intubate the larynx with a soft tube somewhat of the same nature. With the tubes at present at our disposal the larger the tube we use in moderation the less is the danger of ulceration in the trachea, as it fits more accurately and so allows of the minimum of movement. In the second place a very powerful answer to this objection is that by the use of antitoxin serum we are able to remove the tube altogether very much sooner than was formerly possible. In the cases recorded by Mr. Turney the tubes were in position in the larynx altogether for a considerable time, and Dr. W. W. Ord[2] recommends that "an experimental removal of the tube should be made after four days." In the cases mentioned below it will be seen that on the average the tubes were only in position for thirty-four hours, and that the average time before an experimental removal was made was a little over twenty-seven hours. Should it be found, then, that there is no necessity for leaving the tube in for longer than these periods the danger of its causing ulceration would be very much diminished. Mr. Turney[3] attributes some of the ulceration about the root of the epiglottis in his cases to rubbing by the string attached to the tube; the string should always be left attached to the tube for reasons stated below, but the danger of its causing ulceration may be lessened by allowing it to lie fairly loosely in the mouth and not drawing it too tightly before fixing to the ear or side of the face. The aphonia which follows the removal of the intubation tube, and often persists as long as a fortnight or even three weeks, is not necessarily caused by ulceration of the vocal cords; the very fact of these having been kept apart by the tube for a day or two is quite sufficient to account for their loss of function.

With those who have carefully watched a patient whose tonsils and soft palate have been covered with diphtheritic membrane, and have seen as the result of treatment, locally and by the injection of antitoxic serum, in the first place a more healthy appearance of the surrounding parts, succeeded by an evident demarcation at the edge of the membrane and subsequently a gradual melting away, as it were, of the membrane itself without apparently any of it coming away in bulk, the argument that intubation cannot replace tracheotomy when there is membrane in the trachea because it cannot be coughed up through the tube is one that will not carry much weight. Moreover, pieces of membrane are not rarely coughed up through an intubation tube.

[1] St. Thomas's Hospital Reports, vol. xix., Dangers of Intubation.
[2] Intubation of the Larynx, St. Thomas's Hospital Reports, vol. xix.
[3] Loc. cit.

and the size of the piece that can be so expelled varies directly as the lumen of the tube used; if the loosened piece be too large to come through, the tube will very likely be expelled and with it a piece of membrane, and the former can then be replaced if necessary. Should there be, however, evidence of much membrane in the trachea the wisest plan would certainly be to perform tracheotomy and insert a large-sized tube through which the membrane may be coughed up should it become loose. That tracheotomy is preferable to intubation because it avoids the necessity of the respired air passing to and fro over the diseased surfaces is sometimes asserted; Dr. Donkin[4] and Mr. Pitts[5] both make this claim for tracheotomy, the latter saying, however, that "all cases with extensive membrane on the fauces are best treated by tracheotomy." There is a good deal to be said on both sides. However, let us consider that to breathe air which passes over diseased surfaces happens in the multitude of cases where no operative measures are needed. Such patients get well without pulmonary complications, in spite of the fact that the air they have been breathing has often been passing over much more extensively diseased surfaces than in many cases where the upper part of the larynx is affected, or where difficulty in breathing has rendered some measures for its relief necessary. Nor is it likely that anyone would consider it advisable to perform tracheotomy merely to prevent the patient breathing contaminated air. Also, when tracheotomy has been performed it is usually necessary to keep the patient in a tent-bed with an atmosphere moistened and warmed by steam, and which must become laden with the products of respiration; with intubation this is not necessary and we can allow without danger a free supply of fresh air, which is certainly an advantage. One of the greatest dangers of tracheotomy arises from the fact that the patient breathes the air with its dust and foreign bodies of all sorts warmed and moistened, though it be artificially, straight into the trachea and lungs without the filtering process which should normally take place in the nose and naso-pharynx, and I am quite convinced that if one were to perform tracheotomy on a number of healthy children under the age of four or five years, many of them would suffer from, if not succumb to, pulmonary trouble in spite of every care and attention.

The difficulties of the operation consist more in those of learning than of performance; one of its great merits consists in the rapidity with which it can be carried out, and it is only by considerable practice that the skill requisite for this can be acquired; a certain amount of experience can, it is true, be gained by practice on the dead body, when one can at least get accustomed to the feel of the upper opening of the larynx, which is the great guide to the introduction of the tube; but the difference between the operation as performed on the dead and living bodies is so great, from the short space of time allowable and the spasm and resistance which are always present in the latter, that it is only by experience on the living body that we can become really expert. The details of the operation itself are very clearly stated in Dr. W. W. Ord's paper;[6] he states there, however, that two assistants are necessary; this is so if the gag usually supplied with the sets of O'Dwyer's instruments is used, as it requires one person's undivided attention to see that it does not slip from between the teeth. If, however, some form of self-retaining gag be employed the operation can quite easily be done with one assistant, who holds the patient (if a child) on her lap, having first securely pinned a blanket round him, enclosing body, arms, and legs, encircling his waist with one arm and fixing the head with the other hand. The string should be left attached to the tube and fastened round the ear or to the side of the face with a small piece of adhesive strapping; it would be very rash to introduce the tube without this safeguard, and subsequently, should anything suddenly occur to render its removal necessary it can easily be withdrawn if the string is attached, whereas if the instrument provided for the purpose has to be used it is often a matter of some difficulty—more so a good deal than the original introduction of the tube—and there is a danger of pushing the tube into the trachea if the opening in it be not found easily. The presence of the string irritates the patient a little at first and he will probably get at it at once if his hands are not securely fastened, but he very soon gets accustomed to it and, as a rule, after a few hours will not interfere with it even if his hands be unloosened. For reasons given above the string should not be drawn tight; if thought necessary a fine piece of drainage-tubing can be run along it to protect the angle of the mouth, and this also serves to prevent for a time its being bitten through where it passes between the teeth. Dr. Ord[7] very rightly lays stress on the importance of pushing the tube, with the forefinger of the left hand before it is withdrawn from the mouth, well down into its place. A patient will be relieved of his dyspnœa and be apparently comfortable for a time when the tube is not nearly far enough down in the larynx, but as soon as a fit of coughing comes on it is nearly sure to be expelled. It will be noticed in the cases described below that in none of them was the tube coughed out; this fact I attribute, firstly, to having pushed it well down until it really rested on the vocal cords, and, secondly, to having used for them rather larger tubes than according to the gauge supplied with the instruments were suited to the ages of the children. In cases where the tube has been coughed out my experience has been that if this occurs after the first twenty-four hours or so ample time is given to send for aid before the dyspnœa again becomes urgent, but this will depend largely on the condition for which the intubation has been done; in cases of diphtheria, laryngitis, &c., the above statement holds good, but it is not so in those cases where intubation has been performed owing to inability to remove a tracheotomy tube which has been worn for some time; in them, if the wound has wholly or partially closed, should the intubation tube be coughed out difficulty of breathing may come on very rapidly.

The danger of pushing a piece of membrane down with the tube and blocking the trachea must be looked upon more as a possible complication of, than an objection to, the operation, and in very much the same light as a similar complication which is always mentioned in descriptions of the operation of tracheotomy for diphtheria—namely, the danger of passing the tube between the trachea and the diphtheritic membrane lining it. Should this happen during the performance of intubation, the withdrawal of the tube would probably be followed by the expulsion of the loosened piece of membrane; if not, of course, an immediate tracheotomy must be performed, and it does not detract at all from the value of intubation in comparison with tracheotomy to say that in every case one ought to be prepared to perform the major operation should necessity arise. Whether intubation is as safe as tracheotomy from a nursing point of view depends largely on the conditions under which the patient is placed; should he be in a hospital or in any place where help is available at a moment's notice there is little to choose between them; but where this is not so for the first twenty-four or thirty-six hours at any rate then the advantage is all on the side of tracheotomy. At the same time, consideration must be made for the degree of obstruction for the relief of which the operation has been performed; should this not have been very severe, then there is little danger of the dyspnœa becoming urgent for some time after the tube may have been coughed out. On the other hand, if this obstruction were very acute, and the tube were coughed out within twenty-four or thirty-six hours, should no help be at hand the danger to the patient would be great. On the whole, then, we may consider tracheotomy to be preferable to intubation from a nursing point of view in those cases where help cannot be obtained immediately during the first thirty-six hours and the obstruction in the first instance was severe.

In the matter of taking food patients who have been intubated vary greatly; in some fortunate cases they are able to take liquid and solid foods as usual, but this is the exception, the rule being that liquids of any sort cause coughing, probably from inability of the epiglottis to properly close the upper opening of the larynx with the tube in position, and in such cases no liquid should be given by the mouth; if solid and thickened food can be taken comfortably liquids can be given either by the nasal tube, which has the advantage of satisfying the patient's thirst, which is often very great, or by enemata of warm water. The nasal tube has the disadvantage that it often causes a good deal of coughing whilst being passed, and there is always the danger, except in experienced hands, of its becoming curled up in the back of the mouth, and the liquid perhaps poured in in the neighbourhood of the glottis. In cases where food of any sort

[4] The Diseases of Childhood (Medical).
[5] Treves' System of Surgery, vol. ii. [6] Loc. cit.
[7] Loc. cit.

causes choking it is a good plan to give all nourishment in the form of enemata and nutrient suppositories during the time that the intubation tube is in position, if this period is not likely to be a long one. The antitoxin treatment, by enabling the tube to be removed at a very early date, renders this method of feeding practicable. As to the time of experimental removal of the tube, the best guide in this direction is the condition of the pharynx and tonsils if there has been membrane there. As soon as this appears to be getting less and there is a general healthier appearance of the surrounding parts—and this often occurs within thirty-six hours—the tube should be removed, even if it has to be replaced after a few hours. This allows of feeding the patient by the mouth for a time and, moreover, on account of ulceration it is important that the tube should not be left in an hour more than is absolutely necessary. Lastly, the fact that in the past the results of intubation instead of tracheotomy in diphtheria have been unsatisfactory is no argument against employing it in the future, now that in antitoxin serum we have such a valuable aid in the treatment of the disease itself.

To sum up, then, intubation, when combined with the injection of antitoxin serum, has the following advantages over tracheotomy in diphtheria: (1) the operation can be performed more rapidly and with less assistance; (2) it does not need an anæsthetic; (3) the tube can be removed at an early date, leaving no wound and no passage for the respired air except *per vias naturales;* (4) it does not necessitate the patients being kept at any time in an artificially warmed and moistened atmosphere, and obviates the dangers to the lungs of unfiltered air being breathed straight in; and (5) it can be employed in cases where parents or friends refuse leave for the "cutting operation." Tracheotomy has the advantage in those cases where there is a large amount of membrane below the larynx and also in those cases mentioned above, where from a nursing point of view it is unsafe to leave a patient with an intubation tube in the larynx.

During the five months, February to June, 1896, there were at the Hospital for Sick Children, Great Ormond-street, six cases of diphtheria urgently requiring some operative measure for relief of dyspnœa. Five of these were intubated; for the other one, who had, as shown post mortem, extensive membrane in the trachea and bronchi, with gangrenous inflammation of the lungs, tracheotomy was performed. The notes of the former I append, and although, of course, no very definite conclusions can be drawn from such a small number of cases, the uniformly satisfactory result of intubation in them helps to prove that in many instances, when combined with the use of antitoxin serum, this may with great advantage be substituted for tracheotomy. For leave to publish these records I am indebted to the kindness of Dr. Barlow and Dr. D. B. Lees, under whose care the patients were.

CASE 1.—A girl aged three years and eleven months, admitted on Feb. 8th. She had been ill one day, ailing, hoarse, and feverish. On admission there was slight inspiratory stridor, but no difficulty of breathing, hoarse laryngeal cough, a few râles all over both lungs, membrane on both tonsils, and slight enlargement of the glands at the angles of the jaws. There was no albumin in the urine and no rash on the body. Her general condition was very good. 15 c.c. of antitoxin serum were injected at 1 P.M. and the patient put in a tent bed with a steam kettle. During the afternoon the breathing got a little worse and the patient was restless; at 10 P.M. she was much worse, somewhat cyanosed, and very restless; the eyes were prominent, there was loud stridor, and marked recession of the lower ribs and sternum. Intubation was performed with marked relief and directly the patient was put back to bed she fell asleep. On Feb. 9th she had had a good night and retained the tube comfortably, only coughing when she attempted to take liquid food. She took thickened food easily. 10 c.c. of antitoxin serum were injected. On the 10th the tube was taken out at 1 P.M. (it had been in thirty-nine hours). There was a rather thick small patch of silvery white membrane on the left tonsil, otherwise the throat was clear. On the 12th there was slight inspiratory stridor. The throat was clear. On the 17th she seemed quite well. The chest was normal. She had no voice as yet. On March 11th she could talk with good voice and on the 21st she was discharged quite well.

CASE 2.—A boy aged five years and ten months admitted on April 15th at 6 A.M. He had been ill for two days with hoarseness and shortness of breath. On admission there was considerable dyspnœa, with recession of the sternum and lower ribs, and the voice was hoarse and "croupy." There were spots of whitish membrane on both tonsils and uvula. The patient was a pale rickety child with coarse râles all over the lungs. The urine contained one-seventh albumin. Intubation was performed immediately and 20 c.c. of antitoxin serum were injected. On April 15th the tube was removed at 6 P.M. (having been in twelve hours) and replaced at 8.30 P.M. owing to return of the dyspnœa. He could not take liquids with the tube in. On the 16th 10 c.c. of antit toxin serum were injected. The tube was removed at 1 P.M. (having been in sixteen and a half hours) and was no. replaced. On the 17th the patient was fairly comfortable, but had not a good colour, and had still a little recession. The throat was a little better. The albumin in the urine was less; 10 c.c. of antitoxin serum were injected. On the 18th the child seemed better, and the membrane had almost gone from the tonsils. Very much less albumin was found in the urine. For the next four or five days this patient had some rise of temperature and signs of consolidation at the base of the right lung; this, however, soon cleared up, and he made a good recovery.

CASE 3.—A girl aged three years and six months, admitted on May 26th with a doubtful history of illness lasting eight days. On admission the child looked very ill; she was somewhat cyanosed, restless, and had considerable respiratory difficulty, with recession of the sternum and intercostal spaces. Very little air entered the lungs. There was much dirty-coloured membrane on the soft palate and tonsils and the breath was very foul, having the sweetish smell of severe diphtheria. There was considerable enlargement of the glands on both sides of the neck; also a clear foul-smelling discharge from the nostrils. The urine contained one-third albumin. As no benefit was obtained by tent and steam kettle intubation was performed at 9.30 P.M. with marked relief to the respiratory symptoms. 15 c.c. of antitoxin serum were injected on admission. On the 27th the child was fairly comfortable with the tube in, but any form of food by the mouth making her choke she was fed per rectum. The throat was much the same. The urine contained one-third albumin. 15 c.c. of antitoxin serum were injected. On the 28th the tube was removed at 2 30 P.M. (having been in thirty-five hours) and was not replaced. The throat was a little better. 10 c.c. of antitoxin serum were injected. On the 29th the throat looked healthier. There were occasional slight stridor and a little recession of the lower ribs. 10 c.c. of antitoxin serum were injected. There were a few râles in the chest. The albumin in the was still one-third. This patient made a good recovery; albumin decreased slowly. The voice began to return three weeks after the first intubation.

CASE 4.—A boy aged two years and eleven months was admitted on May 29th with three days' history of sore-throat, fever, and discharge from the nose, also difficulty of breathing during the last twenty-four hours. On admission the patient was found to be a well-nourished, pale, somewhat rickety child; he was drowsy and breathed with his mouth open. The nares were obstructed and there were slight stridor and recession of the lower end of the sternum and intercostal spaces. There was a thin purulent discharge from the nostrils and a good deal of whitish membrane was present on both tonsils. The glands at the angles of the jaw were much enlarged. There were some râles and deficient entry of air in both lungs. The urine contained one-third albumin; 15 c.c. of antitoxin serum were injected. The respiratory difficulty increased and the patient became very restless. Intubation was performed at 10 30 P.M. On the 30th he had been quite comfortable with the tube; he looked better and the throat was more healthy. The tube was removed at 1 P.M. (having been in fourteen and a half hours) and for a time he breathed fairly well, but it had to be replaced at 6.30 P.M. on account of the return of the respiratory difficulty. He was fed by the rectum whilst the tube was in and by the mouth whilst it was out. The urine still contained one-third albumin; 15 c.c. of antitoxin were injected. On the 31st the tube was removed at 12.30 P.M. (having been in eighteen hours) and was not replaced. The child seemed better. The urine contained one-half albumin; 10 c.c. of antitoxin were injected. On June 1st there was still a good deal of membrane on both tonsils. The patient seemed brighter. The lungs were normal. The albumin in the urine was much diminished.

On the 3rd there were slight stridor again and slight recession of the lower intercostal spaces, but the child did not seem distressed. The throat was red, but no membrane could be seen. This return of stridor, &c., soon passed off, and a note on June 12th says: "The patient seems quite well except for some cough; a few râles all over both lungs." He subsequently developed diphtheritic paralysis, which proved fatal, and at the post-mortem examination, just one month after the date of intubation, no sign of past or present ulceration was found in the larynx or trachea.

CASE 5.—A girl aged eight years was admitted on June 7th, having been ailing one week with cough and sore throat. On admission the patient was found to be restless, cyanosed, and breathing very badly, with much stridor and recession of the sternum and lower ribs. No membrane could be seen on the throat; there was no discharge from the nose and no enlargement of the glands of the neck. There were râles all over both lungs, but no definite impairment of note on percussion. The heart at the apex beat slightly outside the nipple line; there was no bruit. The urine contained one-fourth albumin. Intubation was performed at 9 P.M., and 15 c.c. of antitoxin serum were injected. On the 8th the patient seemed comfortable with the tube in, respirations were easy and regular, and no membrane could be seen on the throat. The patient took liquid and solid food by the mouth without difficulty. 12 c.c. of antitoxin serum were injected. On the 9th the tube was removed at 9 A.M. (having been in thirty-six hours), and when it was taken out a piece of diphtheritic membrane came away with it. The child seemed quite comfortable. The urine contained one-third albumin. On the 19th there was no need to replace the tube and no more membrane was seen. The albumin in the urine gradually diminished and the patient made a good recovery.

These patients were all treated locally with a spray of perchloride of mercury (1 in 1000) used every hour whilst there was membrane to be seen, those with nasal discharge having a douche of the same (1 in 3000) three times a day. The antitoxin serum used was that supplied by the British Institute of Preventive Medicine, said to contain from 800 to 1000 normal units in 10 c.c.

The following table shows the length of time the tube was in the larynx in each case and also the intervals in those cases where it was introduced more than once.

——	Age.		Interval between admission and 1st intubation.	Tube left in after 1st introduction.	Interval between 1st and 2nd intubation.	Tube left in after 2nd introduction.	Antitoxin.	
							No. of injections.	Total amount.
	Years.	Months.						
Case 1	3	11	9 hours	39 hours	Not replaced	—	2	25 c.c.
,, 2	5	10	None	12 ,,	2½ hours	16½ hours	3	40 c.c.
,, 3	3	6	8½ hours	35 ,,	Not replaced	—	4	50 c.c.
,, 4	2	11	9½ ,,	14½ ,,	5½ hours	18 hours	3	40 c.c.
,, 5	8	0	9 ,,	36 ,,	Not replaced	—	2	27 c.c.

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INTRA-CERVICAL INJECTION OF GLYCERINE: A MODIFICATION OF PELZER'S METHOD OF INDUCING PREMATURE LABOUR.

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THE operation of induction of premature labour is of British origin, having been first suggested and successfully carried out in this country a century and a half ago; on the Continent the proposal met with pronounced opposition, and not till half a century later was it adopted in Germany, and still twenty-five years later in France. The first method employed was the puncture of the fœtal membranes to allow of the escape of the liquor amnii. This method offers almost a certainty as to ultimate result, but much uncertainty as to the date of that result, several days frequently elapsing before labour is completed; there is also a serious disadvantage attaching to this method—viz., that it necessarily from the outset adds one of the most annoying complications of labour (and one that is serious from the aspect of the child)—namely, the loss of the natural fluid wedge, which in normal labour is supplied by the "bag of membranes." In cases, therefore, where the labour is to be induced largely on behalf of the child, this method has been abandoned in favour of another—viz., the introduction of the flexible bougie between the membranes and the uterine wall, which acts by irritating the uterus and setting up its contractions, the natural advantages of the bag of membranes being preserved. This plan, however, presents several disadvantages: (1) uncertainty as to the time of onset of the uterine action and dilatation of the cervix; (2) risk of hæmorrhage from detachment of the placenta by the bougie during its introduction; (3) risk of accidental puncture of the membranes; and (4) risk of introducing septic matter into the uterus. The last may with ordinary care be disregarded, but the risks of interfering with the placental attachment and of puncturing the membranes are serious drawbacks. A modification of this method—viz., the introduction of several bougies at the same time along different segments of the uterine circle—has got over the difficulty of the uncertainty as to time of action, but has proportionately increased the other risks. Of late the use of De Ribes' bag has been brought prominently forward, but its use is attended by many difficulties and of necessity requires some preliminary cervical dilatation. Frequently, indeed, its introduction fails to induce uterine action, and the bag has to be used as a mechanical dilator of the cervix by continued manual traction upon its outlet tube.

Among these methods, then, we do not find one that is perfect or on which we may rely, and it was with much interest that I read an account of what had been suggested and successfully carried out since 1890 by Pelzer in the Maternity Hospital of Cologne. Pelzer's plan for the induction of premature labour consists in the injection of glycerine into the uterus between the fœtal membranes and the uterine wall, the mode of operation being as follows. The patient is placed in the knee-elbow, or in Sims', position. A piston-syringe attached to a catheter, curved to correspond with the contour of the uterus, is filled with glycerine (from 50 to 100 grammes), care being taken to exclude all air. The cathether is introduced between the membranes and the posterior uterine wall and the glycerine slowly injected. In his first paper Pelzer gave an account of four cases in which labour was induced by this means, but in one of these cases (the first) the membranes were accidentally punctured by the syringe. The method as thus carried out by Pelzer shares in common with the Krause method the disadvantage of the risks of puncturing the membranes and of interfering with the placental attachment during the introduction of the catheter, though it has the advantage of more certainty of action and of inducing labour in a shorter time.

Recognising that this method was effective and would offer advantages if the above-mentioned risks could be avoided I decided to employ it in the first suitable case. I was anxious to find out if it was absolutely necessary to introduce the nozzle of the syringe along the uterine wall, or if one could not set up uterine action and obtain dilatation of the cervix by merely injecting the glycerine within the cervical canal only—i.e., would an intra-cervical as distinct from an intra-uterine injection bring about the desired result? This method was first employed in the following case. The patient, aged thirty-eight years, whom I had seen in consultation with her own medical man in three of her previous confinements, was a woman of

small stature with protuberant abdomen and of essentially rachitic appearance. Her pelvis presented the usual rachitic features, the antero-posterior diameter of the brim measuring two and three-quarter inches. It is unnecessary to give her obstetric history, but I may say that, as I had in a previous confinement been compelled to perform craniotomy, I had advised that premature labour should be induced at about the thirty-first week of any subsequent pregnancy. This accordingly was begun on Nov. 28th, 1895, by the injection of glycerine. On examining the patient I found the external os just sufficiently patulous to admit the tip of the right index finger; the cervical canal was present and the finger could not reach the internal os. Here was an eminently suitable case for observing the effect of an injection of glycerine into the cervix only. At 4.50 P.M. one ounce and a half of pure glycerine was slowly injected into the cervical canal, the patient lying in Sims' position. Part of the glycerine could be felt to flow back into the vagina. This injection occupied five minutes. Fifteen minutes later I proceeded to repeat the injection, and to my surprise, on examining the cervix, found it already so far dilated as to easily admit my right middle finger, which felt the lower pole of the fœtal sac, but the cervical canal still persisted. I injected one ounce and a half of glycerine and during the injection passed the nozzle of the syringe through the inner os, guiding it with my index finger, which felt the bag of membranes moveable and detached from the lower portion of the uterus; the syringe was therefore passed upwards for a distance of three inches from the external os; no force was used nor was any manipulation necessary, the nozzle passing quite easily and without resistance into the space between the uterine wall and the already detached membranes. The injection was repeated at 9 P.M. and 11 P.M., when the cervix readily admitted two fingers. The night passed quietly and the patient slept, complaining of no uterine pains. At 11.30 next morning I again saw the patient and gave another injection of three ounces, the os admitting two fingers easily and there being no cervical canal, but still the patient said she had felt no pains. Up to this time then there had been no uterine contractions appreciable to the patient, but there had been definite dilatation of the cervix. At 4.30 P.M. I again saw the patient who said she had had slight grinding pains in the abdomen and back during the day at intervals. The os was of the size of half-a-crown, very soft and dilatable and its margins thin; the bag of membranes was presenting. As circumstances conspired to prevent my seeing the patient during the evening and all was going on well I decided to do nothing more at present, though I felt sure that another injection would rapidly advance matters. The cervix was so soft that, if there had been any necessity, it could have been easily and rapidly dilated by hand. At midnight I again saw the patient. The os was of the size of a five-shilling piece and the patient had had regular slight pains during the evening. Three ounces of glycerine were injected into the uterine cavity, and this was followed by immediate uterine contractions. The pains continued regularly and at 4.30 A.M. I found the cervix fully dilated and the membranes hanging down into the vagina like a glove-finger. Strong uterine pains were going on, and the child's head was arrested at the brim. Under chloroform the membranes were ruptured and the child rapidly delivered alive by forceps. The placenta followed without bleeding twenty minutes later. The puerperium was essentially normal in type, the mother making a much more rapid recovery than after any previous labour. I should add also that this labour occupied a shorter time than any of her preceding labours.

The important points which this case shows are: (1) that the intra-cervical injection of glycerine produces a rapid and progressive dilatation of the cervical canal; (2) that at the same time the lower pole of the ovum becomes detached from the lower uterine segment; (3) that the intra-uterine injection of glycerine between the detached portion of the membranes and the uterine wall may be carried out without fear of puncturing the membranes or of interfering with the placental attachment; and (4) that labour is effectually induced. As to the manner in which glycerine acts Pelzer offers the three following suggestions. (1) It acts as a direct irritant of the uterine surface setting up muscular contractions; (2) it acts through a mechanical separation of the membranes; and (3) its hygroscopic action causes a transudation of the liquor amnii; the ovum becomes smaller and is detached from the uterine wall; there is at the same time a contraction of the uterus upon its diminished contents. But in addition to this power of setting up uterine contraction my own observations show that glycerine possesses the power of causing dilation of the cervical canal before contractions of the body of the uterus, which are appreciable to the patient or the physician, are set up. The injection of pure glycerine into the cervical canal is followed by immediate softening and relaxation of the cervical tissues with dilatation of the cervical canal, and this result seems to be too rapid to be the result of muscular action.

I may here refer to another case where the intra-cervical injection was employed. I was asked by a practitioner to see a woman with the following history. The patient, a multipara, had been delivered of several children without difficulty. She was now about eight months pregnant; three weeks previously she received a great shock and felt the child make violent movements; from that time she had felt no more movements: the uterus had settled down lower in the abdomen and the breasts had diminished. On Friday evening labour pains set in and were for some hours vigorous, but gradually diminished in intensity and finally ceased; at the same time there was no dilatation of the cervical canal. When I saw her she had passed a restless, sleepless night, and she was very ill, with a pulse of 120 per minute: in the morning it had been 130 and had caused great anxiety to her medical attendant, who, not liking the course events had taken, decided to share responsibility with another. On examination of the abdomen I could feel no fœtal movements nor could I hear fœtal heart sounds. On examination per vaginam I found the cervix undilated, barely admitting the index finger; the child's head was presenting; no uterine action was going on. In order to dilate the cervix I decided to employ glycerine, and, placing the patient in Sims' position, I immediately proceeded to inject one ounce and a half into the cervical canal, the greater part escaping into the vagina, but within fifteen minutes the cervix was dilated sufficiently to admit the middle finger and the membranes could be felt. I repeated the injection, carrying the syringe nozzle through the internal os and injecting three ounces. Three-quarters of an hour later the cervical os was the size of a five-shilling piece and the membranes could be felt separated from the entire lower segment of the uterus, but no uterine pain had occurred. Labour was ended by manual dilatation and version. The child was dead and had been dead for two or three weeks.

This case illustrates forcibly the fact that dilatation of the cervix is produced by the injection of glycerine into the cervical canal without the incidence of labour pains, and along with the dilatation of the cervix there is a separation of the lower pole of the ovum from the lower uterine segment. How this is produced I do not know, but the clinical fact is so evident and the advantages are so apparent that I feel justified in bringing the fact forward. I would, therefore, wish not only to support Pelzer's suggestion, that the intra-uterine injection of glycerine is an efficient means of inducing labour, but I would point out the advantage of modifying his procedure by a preliminary use of the intra-cervical injection. I should recommend first an intra-cervical injection, whereby the canal is dilated and the membranes separated from the lower uterine wall, leaving a space into which the catheter may be passed without force and a further injection made. In this way we may avoid the risks of puncturing the membranes and of interference with the placenta. I have also employed this method of cervical dilatation as a preliminary measure to the use of De Ribes' bag, whereby the introduction of the bag is much facilitated, and it may be used with equally satisfactory results in conditions of rigid os, where labour is lingering and it is necessary to assist dilatation. Since Pelzer's first paper appeared the method has been subjected to criticism, and it has been stated that the injection of glycerine is apt to cause disintegration of the red corpuscles, with resulting hæmoglobinuria and nephritis. This, however, is not established, but Pelzer himself has expressed the opinion that his method should, perhaps, not be employed in cases of eclampsia and Bright's disease. By the method I now advocate it seems to me that the risk of undue absorption is done away with, and I should not hesitate to employ the intra-cervical method in cases of eclampsia as a preliminary to manual interference (if necessary), as the depleting action of the glycerine would probably act in a beneficial manner.

Manchester.

TWO CASES OF LATERAL DISLOCATION OF THE LEFT KNEE-JOINT.

BY FREDERICK PAGE, M.D. EDIN.,
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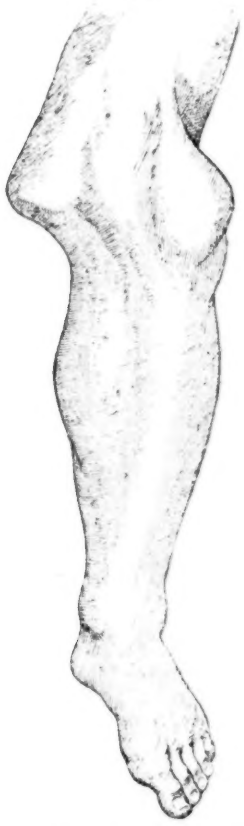
CASE 1.—The patient, from whom the drawing (Fig. 1) was taken by Mr. Gover, a dresser at the Royal Infirmary, was thrown from the saddle on Nov. 11th, 1895. A man held the horse by the head and retained his hold, so that the animal gyrated round him two or three times, plunging violently and dragging the patient, with his left foot fast in

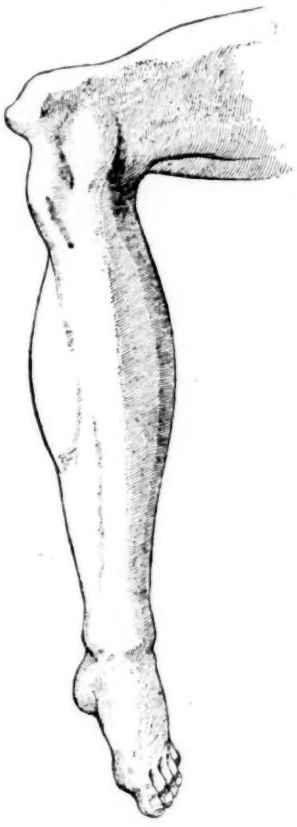
FIG. 1.



the stirrup, upon the ground. The dislocation was readily reduced in the Royal Infirmary soon after the accident happened.

CASE 2.—The drawing from which Fig. 2 is reproduced was made a few years ago by Dr. W. Baigent from a patient admitted into the Royal Infirmary and treated by him while he was house surgeon. I am indebted to Dr. Baigent for the accompanying history of the case and for the sketch. At the time of the accident the patient, a man aged thirty years, was under a boiler in a crouching position, with the legs semi-flexed and resting on the right side. The heavy boiler, which was suspended by chains, slipped suddenly, but was arrested by the chains before its whole weight crushed the patient. The result of this lateral pressure on the semi-flexed legs caused the dislocation of the left knee-joint. The head of the tibia was displaced outwards and backwards, and at the same time rotated outwards to such an extent that the foot and front of the leg looked almost directly outwards. The head of the tibia was displaced completely off both condyles of the femur the inner condyle almost tearing through the tightly-stretched skin over it. There was, however, no wound. The patella was carried outwards and fixed in a side position, its inner border being prominent. There was no fracture. Reduction was effected by flexing the leg on the thigh and the thigh on the pelvis. The leg was then rotated inwards, the head pressed inwards,

FIG. 2.



and the leg extended at the same time. The case did well and the result left nothing to be desired.

Remarks.—In neither Mr. Erichsen's nor in Mr. Treves' text-books on surgery is there a drawing of lateral dislocation of the knee. It is in the belief that these drawings of a somewhat rare accident may be of sufficient interest to many of your readers that they are thought worthy of reproduction in THE LANCET.

Newcastle-upon-Tyne.

ON THE VALUE OF AN EARLY CYSTOTOMY IN ACUTE HÆMORRHAGIC CYSTITIS.

BY E. F. GORDON TUCKER, M.R.C.S. ENG., L.R.C.P. LOND.,
LATE HOUSE SURGEON, LONDON HOSPITAL.

THE following case shows very forcibly the value of early surgical interference in certain cases of acute inflammation of the bladder.

A healthy man aged thirty-two years came under my care early in August, during the absence of my friend Dr. Naumann of Gower-street, with symptoms of a subacute cystitis complicated with occasional retention. He had been for two days under the care of Dr. Naumann, who has kindly given me permission to publish this case. The patient had been the subject of an urethritis, which was subsiding, but he was troubled by somewhat frequent and always painful micturition. The act of micturition was always more or less difficult, and at times he had retention which necessitated

the use of a silver catheter. The instrument passed easily and without exciting pain. He was ordered to leave his business and treated for five days in the usual manner with infusion of buchu and hyoscyamus and salol internally, the use of morphia suppositories and the application of hot fomentations to the perineum and hypogastric region, and strict aseptic precautions were taken with reference to the silver catheter, the use of the instrument becoming a necessity. In addition the bladder was washed out daily with warm boracic solution. The urine was at first alkaline, but later became ammoniacal, and as the case progressed the patient's condition became rapidly very distressing, and probably his malady was aggravated by the fact that, being of a very impatient disposition he would drive out at all times of the day and night to see me, instead of sending for me as directed. On the sixth day there was great tenderness on passing a catheter, and the most gentle manipulation caused bleeding from the urethra, and the urine drawn off contained blood. There was a hindrance at the neck of the bladder to the passage of the catheter. On examination per rectum the prostate was felt to be enlarged, hot, and very tender. On the morning of the seventh day I found him suffering intense pain in the abdomen, the bladder distended above the pubes, with complete retention save that after prolonged effort he would pass a few drachms of blood. The catheter, the passage of which caused intense pain, drew off rather more than a pint of ammoniacal urine, containing a great quantity of blood. This was followed by much relief, which was, however, only temporary, inasmuch as the operation had to be repeated in a very few hours with a like result, except that the proportion of blood in the urine was much greater. In the afternoon I was compelled to use the catheter again and drew off a pint and a half of almost pure blood. As the patient was becoming worn out by loss of blood, the prolonged pain, and want of sleep, I decided to operate that evening. With the assistance of Mr. W. B. Butler and Dr. A. Cooke the patient was put under A.C.E. mixture and a catheter passed and some blood drawn off. The bladder was then injected with five ounces of warm water and the usual suprapubic incision made. The intersection of the recti was divided just above the pubes and the forefinger introduced, the bladder pushed back and the subperitoneal fat and peritoneum pushed up and the wound enlarged. A free opening was then made in the lower half of the front wall of the bladder with a Syme's knife and the cavity of the viscus explored. Some blood clots were turned out, and the middle lobe of the inflamed prostate felt projecting into the bladder. A catheter was again passed and the bladder washed out, first with a warm weak carbolic solution and then with a solution of hazeline. A rubber tube was put into the bladder and the operation concluded in the usual manner. The tube was kept in the wound for forty-eight hours, and then a light iodoform gauze drain substituted for another twelve hours, the urine being allowed to drain from the first into wood-wool pads and the skin of the abdomen protected by the free application of vaseline. Salol was administered in fifteen-grain doses twice a day. The urine became normal in reaction on the third day and the bleeding did not recur. On the evening of the first day after operation the temperature was 101° F., and on the second evening 100°, but became normal on the third day and remained so. There was slight abdominal pain on the first day, but this speedily passed off, and the patient was able to sleep naturally and in comfort, and of this he was much in need. On the seventh day the patient complained of slight abdominal pain and his temperature rose to 103·8°; the next day he had a slight purulent urethral discharge, which became profuse and ceased in a few days, and by the tenth day his temperature was normal. With this slight interruption he made an uneventful recovery and passed all his urine normally on the seventeenth day, and in three and a half weeks was convalescent and able to go into the country.

I submit that an acute cystitis due to extension of inflammation from the deep urethra cannot be dealt with in a surgical manner too early. The intense distress of the patient is aggravated by the obstruction to the urinary outflow caused by the congested state of the prostatic and membranous urethra. Cystotomy and drainage of the bladder gives immediate and absolute rest to the organ—rest which is a *sine quâ non* for the subsidence of the inflammation. The prostatitis can go on to form a prostatic abscess, which will almost certainly burst into the urethra and be discharged, and the patient loses at once the distressing pain which is wearing him out from want of sleep. A suprapubic operation seems preferable to a perineal cystotomy in the case of patients who cannot afford to have skilled nursing, as in such cases it seems impossible to prevent fæcal soiling of the perineal wound. The chief danger to life after the suprapubic operation demanded by vesical disease of any kind is brought about by a pelvic cellulitis arising from extravasation of foul urine around the bladder. But I would venture to submit that this danger is reduced to a minimum if the operation is performed early in the case—that is to say, before the bladder epithelium has undergone extensive degenerative changes consequent on its acutely congested state, these degenerative changes reacting on the already abnormal urine and intensifying its condition. I am aware that there is no absolute novelty in these suggestions. Tuffier[1] speaks with approval of a cystotomy for acute cystitis. But my contention is that the operation should be done early in the case, before the time when English and foreign surgeons seem to advocate it. One of the best aids to a speedy convalescence is that the patient should be made to sit up in bed as soon as possible after the operation, and this can be done almost immediately if the patient has not been allowed to sink to the depths of exhaustion by prolonged pain. In the absence of figures as to the mortality of cystotomy for acute cystitis it would be rash to be dogmatic; but I would suggest that if in cases like the above the operation were performed very early, the bladder irrigated at the time of operation, and the parietal wound kept well open, the mortality of the operation would be exceedingly low.

Cambridge-terrace, W.

HYPERTROPHY OF THE PROSTATE; SEVERE CYSTITIS; DOUBLE CASTRATION; RECOVERY.

BY ARTHUR HUNT, M.R.C.S. ENG., L.R.C.P. LOND.,
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IN 1893 Professor White of Philadelphia suggested double castration with the definite object of causing atrophy of the hypertrophied prostate gland. It occurred to him that if the analogy between hypertrophy of the prostate and uterine fibro-myomata was a real one that possibly castration in one case would have the same effect as oöphorectomy in the other. Since that date the operation has been performed a considerable number of times, chiefly in America. In the *Annals of Surgery* for July, 1895, Professor White contributes an exhaustive article on the subject. He gives a summary of 111 cases. Rapid atrophy followed in about 87 per cent., and the most troublesome symptoms were relieved in 83 per cent. Twenty cases proved fatal, giving a mortality of 18 per cent. This summary includes five cases reported by Mr. Faulds of Glasgow, four of which proved fatal. The following case is a contribution to the subject and presents several points of interest.

A man aged seventy-three years, of fine physique had an attack of retention of urine in April, 1893. It was brought on by a chill and until the retention he was unaware of anything being amiss. On examination I found the prostate to be tender and enlarged. He was kept in bed for a week and the urine was drawn off by a catheter twice daily. After this he remained free from trouble in micturition to the following November, when retention again occurred after exposure to wet. He was confined to bed for a fortnight and catheter life again began. The amount of residual urine was about five ounces. The importance of keeping the catheter clean and of adopting measures to prevent the onset of cystitis were duly impressed on him. He was indeed so careful, that he used a new catheter every three or four days. The prostate had increased in size since the previous attack of retention. Decomposition of the urine was for a long time prevented, but after three months' daily use of the catheter the urine gradually became offensive and ammoniacal. Pain about

[1] Traité de Chirurgie. Dupray et Réclus, 1892.

the perineum and thighs became constant and the passage of the catheter more difficult. The whole length of the catheter was inserted before any urine came. In February, 1894, the left testicle became inflamed and he was again confined to bed. During the continuance of the orchitis the left side of the prostate sensibly diminished in size, and the catheter entered the bladder more easily. The bladder was daily irrigated with various antiseptic solutions, salicylic acid, quinine, and boric acid being used in turn. Iodoform emulsion was injected and left in the bladder. His diet was carefully regulated, and hip baths were used every night and gave some relief to the pain. Morphia suppositories were occasionally used for the same purpose. Of internal remedies large quantities of infusion of buchu freshly prepared every day seemed to do most good. The amount of residual urine increased, and he passed only a few ounces daily without the catheter. The anus was patulous and the mucous membrane of the rectum prolapsed. He lost flesh, became very weak, and suffered from insomnia. Mr. Gilbert Barling of Birmingham kindly saw the patient with me on June 11th, 1894. The urine was now horribly offensive, and a column of it on standing showed just half pus. There was never any blood. The prostate had all the while continued to increase uniformly in size, and the upper border of the gland could not be reached by the finger; the gland was very firm to the touch and projected backwards, almost blocking the rectum. Laterally it extended nearly to the sides of the pelvis. Mr. Barling advised using the catheter every eight hours and to continue the same treatment as before, but no improvement followed, and all the urine was passed by catheter. In the autumn the patient became considerably weaker and was confined almost entirely to the house. At this time I read of double castration as a cure, but hesitated to advise its performance, as the cases were few and little was known about it. I wrote to Mr. Mansell Moullin, who kindly gave me much valuable information about his cases. The patient being quite willing and anxious for the operation, I performed double castration on March 15th, 1895, by a single median incision, as advised by my friend, Mr. James Swain of Bristol. Three hours after the operation the patient passed three ounces of urine naturally. This was the largest amount passed without a catheter for six months. For five days between forty-two and fifty ounces were passed daily, then retention occurred. I was surprised on examining the gland to find my finger tightly gripped by the muscles about the anus. The gland was even then slightly diminished in size. On the seventh day the wound was healed and the patient allowed up on the sofa, but there was much swelling and tenderness of the stumps of the spermatic cords. This increased and I feared suppuration. With hot boracic acid fomentation and glycerine and belladonna paint the tenderness disappeared, but the swelling continued and so did the retention. On April 9th the power of voluntary micturition returned and the swelling of the cords sensibly diminished. I have no doubt in my own mind that one was dependent upon the other. Six weeks after the operation there was still some slight induration about the stump of the left cord, but all the urine was passed naturally and with increasing force. I was surprised at the steady increase of voluntary power. The gland continued to decrease in size, the cystitis became less and less, and his general condition so improved that in August, 1895, he was able to go to Scotland for shooting and fishing and walked as much as twelve miles a day. Irrigation of the bladder was practised on and off till August, since when no catheter has been passed. The urine is now clear and quite free from odour. The patient has quite recovered his former strength and spirits and is able to go out in all weathers. There is very little of the prostate gland to be felt.

Since writing the above a paper by Mr. Mansell Moullin on Some of the Immediate Results produced by Castration in cases of Enlargement of the Prostate appeared in THE LANCET.[1] The case mentioned by him is the one here recorded. It will be seen that the sphincter of the bladder as well as that of the anus was affected by spasm, and that not until the swelling of the spermatic cords subsided did normal micturition take place. That the bladder regained its tone after the months of catheter life and severe inflammation of its mucous membrane is interesting. Certainly nothing is wanting in this particular case to complete a perfect cure.

Note, September, 1896.—The patient has kept in very good health and has gained flesh. The urine is acid and free from pus. No catheter has been passed for thirteen months. Micturition is normal. The atrophy of the prostate is apparently complete.

Wolverhampton.

[1] THE LANCET, Nov. 30th, 1895.

A CASE OF PUERPERAL ECLAMPSIA TREATED BY HYOSCINE.

BY NORTON B. CLOWES, M.R.C.S. ENG., L.R.C.P. LOND.

THE patient was a woman aged twenty-five years, who had been married eight months. The family history was good, there being no history of any hereditary disease. She had had measles twenty years ago; she had never had scarlet fever, dropsy, headache, or sickness. I was engaged to attend the patient in her confinement at the end of October, 1895. On Sept. 20th, at 9 P.M., I was called to see her and was told the following history. The patient had suffered from constipation and the bowels had not acted for three days. For the last twenty-four hours she had had "pains" coming on at irregular intervals, and for the last few days her husband had noticed her to be peculiar in her ways—i.e., dull, forgetful, and careless—and on two occasions she was found wandering aimlessly about the room at night after having retired to bed. On examination the cervix was found to be soft and admitted one finger; it was a vertex presentation. A large enema was given, but was only slightly successful. Fifteen grains of chloral hydrate were administered by the mouth. On Sept. 21st, at 12 A.M., the patient had had occasional pains during the night, had wandered in her mind, and slept very little. On vaginal examination the cervix was found to be of the size of a shilling. At 6 P.M. I was told by her friends that the patient had just had a fit, falling on the bed and "kicking and shrieking." The tongue and lips were not at all bitten. I thought the seizure to be more of the nature of a hysterical fit. On vaginal examination the os was found to be of nearly full size. The membranes were protruding and the head lying in the first position. At 10 P.M. I was called as the patient had had two fits in quick succession. On arrival I found her in a semi-conscious state and very difficult to manage. The tongue and lips were much bitten and swollen. The membranes were ruptured. Small, short "pains" coming in quick succession soon brought the head down on the perineum. The examination made by me brought on another fit. The patient's head turned slowly to the right with the eyes staring and fixed; at the same time there were tonic spasms of all the muscles of the body and limbs. This was quickly followed by clonic spasms, foaming at the mouth, and cyanosis. After the convulsions ceased the patient was very bad. The pulse was irregular and intermittent and the respiration shallow. Chloroform was administered, forceps applied, and the patient was delivered of a small female child. A hot antiseptic vaginal injection was given and a binder put on. After this the patient slept comfortably for an hour and a half, then the convulsions returned, but they were not of so severe a nature. At 4 A.M. I was called again and found that the patient had had ten fits in two and a half hours. The tongue and lips were again very much bitten and she looked very ill. Having my hypodermic case with me, but no morphia tablets, I decided to try hyoscine, and $\frac{1}{75}$th of a grain was injected into the arm. This little operation brought on a severe fit, which was of the same character as the one described. I waited half an hour, but no more fits occurred, and she lay quite quiet, having short intervals of sleep. In this condition the patient remained until 10.15 A.M., when she again became convulsed, and $\frac{1}{75}$th of a grain of hyoscine was repeated and the urine drawn off. It was acid, sp. gr. 1015, lithates; albumin, nearly half; there were no casts or blood. Eight grains of calomel were administered by the mouth. The temperature was 99·2° F., the skin was dry and warm, and the pulse 110 and soft. At 1.30 P.M. the patient had only had one mild fit since the injection. The abdomen was very swollen and tympanitic. There was no action of the bowels. One ounce of milk was taken and the hyoscine injection repeated. At 6 P.M. the patient had slept soundly since the injection at 1.30. There was no action of the bowels. Two minims of croton oil in two ounces of milk were given. At 10.30 P.M. she had had no more fits. The patient was awake

and very restless, and was kept in bed with difficulty. The pulse was 110 and the temperature 99 0°. No action of the bowels had occurred. Two minims of croton oil were repeated in four ounces of milk. One-third of a grain of morphia was injected hypodermically, which produced sleep in ten minutes. On Sept. 23rd, at 8 A.M., the patient had had a restless night. There had been no fits, no action of the bowels, and no micturition. She had taken three-quarters of a pint of milk, was more conscious, and knew her friends and myself. An enema of a pint and a half was given, followed by a very slight action. At 1 P.M. the patient was much better. She had been sleeping well. The stomach was very swollen and tympanitic. She complained of pain at the umbilicus. She passed urine containing large quantities of albumin. One ounce of oleum ricini was taken which acted in ten minutes freely. At 9 P.M. the patient had slept well and taken plenty of nourishment. On Sept. 24th the pulse was 86 and the temperature 99°. There was a slight non-offensive discharge. The bowels acted three times and the swelling of the abdomen had gone down. She was taking nourishment well. On Sept. 25th the mouth was very sore and there were superficial sloughs coming off the tongue and lips. The urine was acid, sp. gr. 1022, containing about one-fourth albumin. Memory was gradually returning. She remembered nothing of her confinement.

Reading.

A CASE OF DIPHTHERIA COMPLICATED WITH BRONCHO-PNEUMONIA AND CUTANEOUS EMPHYSEMA AND TREATED WITH ANTITOXIN: RECOVERY.

BY FRANCIS RILEY, L.R.C.P. LOND., M.R.C.S. ENG.

ON April 25th I was summoned to attend a patient (a boy aged ten years) who had been ill four days previously and was supposed to be suffering from "a cold on the chest." He was being actively treated with poultices. I found him lying on his back in an exhausted condition, no food having been taken for two days on account of pain in swallowing. There was marked stertorous breathing accompanied by respiratory excursion of the larynx, and the muscles of forced respiration were acting strongly. The complexion was dusky and the glands at the angle of the lower jaw were enlarged. A petechial eruption was present on the chest. The pulse was 120 and irregular and the temperature 101° F. On examination of the fauces I found a small patch of grey exudation on each tonsil. Laryngoscopic examination was impossible. In view of the great obstruction to respiration I advised immediate tracheotomy, but this was refused. The patient was placed upon a mixture containing perchloride of iron and chlorate of potassium and his throat was ordered to be sprayed with a solution of 1 in 4000 parts of perchloride of mercury and lactic acid. Meanwhile a special messenger was sent to the nearest town for a supply of antitoxin. On April 26th the condition remained about the same and 10 c.c. of antitoxin (Behring, 1000 normal units) were injected under the skin of the chest and thigh at 12 A.M. No antitoxin syringe being available use had to be made of an ordinary hypodermic syringe, which was re-filled again and again. At 3 P.M. the patient had a suffocative attack lasting about a quarter of an hour, during which he became cyanosed. He had had a similar attack the previous night. An emetic was administered, and a piece of diphtheritic membrane being coughed up the patient was relieved. At 9 P.M. 5 c.c. of antitoxin were injected under the skin of the arm. During the night the patient had another suffocative attack, followed by the ejection of a piece of membrane, and pieces of membrane continued to be coughed up during the next twenty-four hours. A third injection of 5 c.c. of antitoxin was made during the next morning. No local or general reaction followed the injection and the temperature throughout did not exceed 102·4°. After the second injection the patient slept soundly, which he had not done for several days, and he began to improve daily. In a day or two he began to take food by the mouth, whereas he had previously been fed on nutrient stimulant enemata. The breathing became much easier, though there remained a considerable amount of albumin in the urine. On April 28th I discovered signs of broncho-pneumonia in both lungs, with localised patches of dulness and abundant moist crepitations. A fulness was observable mainly over the manubrium sterni and suprasternal notch and extending slightly over the left chest, which on palpation afforded a distinct crepitation like that obtained on handling normal lung. This patch of cutaneous emphysema remained localised to the situation mentioned and entirely disappeared within the next three days. In ten days the lungs recovered their resonance, the albumin disappeared from the urine and the eruption from the chest, and the patient was able to sit up in bed. A temporary aphonia due to paralysis of the muscles of the larynx persisted for some weeks.

Remarks.—I am not aware that a case of cutaneous emphysema complicating diphtheria has been previously recorded. It would appear to have been due to the extreme destruction of tissue that must have taken place, as manifested by the intensity of the symptoms and the repeated coughing up of diphtheritic membrane, and the forcing of air through the walls of the lower part of the trachea or the bronchi during the violent expiratory efforts of the patient. Such weakness of the walls was only temporary, as the emphysema did not increase, but commenced to disappear from the first.

Winton, New Zealand.

A CASE OF RAPIDLY FATAL ACUTE CONGESTION OF THE LUNGS.

BY CECIL MUSGRAVE, M.D. LOND.

THE following notes of an unusual case may perhaps be of general interest, not only on account of the extremely rapid termination, but also because of the doubtful nature of the causation.

The patient was a man aged fifty-four years (looking some years older) who was taking a holiday, in the course of which he had pursued his usual recreations and had bathed and cycled frequently. For the month during which he had been away from home he had enjoyed apparent good health, with the exception of a slight cold in the head and an occasional trifling cough. These symptoms had disappeared for some days previously to the fatal illness. As regards previous history there was no record of bronchitis or other lung trouble. There was no evidence of cardiac disease. Some three years previously he had been treated for "kidney disease," but his friends could furnish no details of its actual nature. For the last year, however, he had considered himself quite free from the complaint. In this condition of seeming good health and after a morning bathe the patient tricycled some twelve miles on the afternoon of a day characterised by a moist atmosphere and a cold wind. Upon his arrival home at 7 P.M. he complained of "wheezing on the chest" and sent for medical aid. At 7.30 his condition was as follows. He was sitting propped up upon a sofa breathing rapidly and laboriously—thirty-six to the minute. The face and hands were cyanotic and the skin was bathed in a cold, clammy perspiration. Respiration was accompanied by a distinctly audible wheezing and expiration was prolonged. There was no cough. Talking increased the distress. The patient complained of frontal headache. The pulse-rate was 136, the pulse somewhat small, regular, and compressible. The arteries at the wrist were distinctly but not excessively fibroid. The temperature was 99 4° F. The patient was immediately taken into the adjoining room and rapidly put to bed and did not at first seem worse for the exertion. On examination the chest was found to be rigid and deficient in power of expansion. The heart's impulse was neither visible nor palpable. Fine fremitus was felt all over the chest, front, and back. The percussion note was high pitched, but resonant everywhere. The breath sounds were loud and the expiration was harsh and prolonged. There were numerous fine, moist, subcrepitant rales audible all over the chest even in front, but they were most numerous at the lower halves at the back. The heart sounds were fairly loud, of good quality, and regular. There was no murmur, no œdema of the legs, and no ascites. The patient almost immediately became worse. He was obliged to sit up in bed and the dyspnœa increased. He commenced to cough paroxysmally and expectorated large

quantities of very frothy serous fluid, stained a light pink. The cough in a few minutes' time became almost convulsive in violence, and the patient rolled himself about uncontrollably, while the cyanosis deepened. After a short absence in order to write a prescription he was found to be very much worse. Coughing was ceasing and the cyanosis was still deeper. The mental condition was becoming drowsy and apathetic. The pulse was still regular and full, but slower. Brandy and strychnine were both available, and I injected subcutaneously ten minims of the former and $\frac{1}{30}$th grain of the latter, but without the slightest effect. The patient failed to rally and passed almost immediately into complete unconsciousness. Respiration became very irregular, infrequent, and shallow. Frothy expectoration poured from the mouth with each gasp. The pulse remained regular, 70 to the minute. Strychnine was again injected, but in a few more minutes respiration entirely ceased, within one hour of the first symptom noticed by the patient. The pulse beat for quite a minute after the last breath.

The diagnosis of the actual lung condition was a matter of little difficulty. There seems no doubt that there was present an intense congestion of the vascular tissues of the organ and that death occurred from asphyxia as the direct result of mechanical blocking of the tubes by the excess of secretion. The intensity of the process was, however, certainly unusual, and the question of causation is obscure. Taking it for granted that interstitial nephritis was actually present, such an acute process does not approximate to the usual form of œdema of the lung associated with this disease; and, moreover, if this were the actual cause it would be none the less remarkable as the only present symptom of the malady. I am inclined to think that the real cause lay in the exposure to a raw atmosphere of lungs already in a condition of slight catarrh, and that the effects of exertion, and possibly the presence of chronic renal disease, were contributing factors.

Cromer.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON THE USE OF AMYL NITRITE IN THE STATUS EPILEPTICUS.

BY OLIVER L. ROBINSON, M.R.C.S. ENG., L.R.C.P. LOND.,
SURGEON-CAPTAIN, ARMY MEDICAL STAFF.

A WELL-MARKED case illustrative of the value of this drug recently came under my notice which may be deemed worthy of record. About 9 o'clock one morning I was called to see a woman aged thirty-four years who, I was told, had had a succession of fits increasing in severity since 11.30 P.M. the previous night. She had formerly been under my care and had been subject to "fits" since childhood; she had not, however, had an attack until the present one for the past six months. I found her lying in a comatose condition, only interrupted about every twenty minutes by an epileptic seizure; in the intervals she lay with flaccid limbs, purple face, dilated pupils, and stertorous breathing. The temperature was 103° F. and the pulse 130 per minute. She had never had a previous attack of such severity, her former illnesses being limited to a single seizure. Ice was ordered to the head and the upper part of the spine, and a rectal injection of bromide of potassium and chloral hydrate was given. There was no appreciable change in her condition and the injection was repeated in two hours' time. At 3 P.M. she appeared to be considerably worse, the fits continued unabated in severity at intervals of from fifteen to twenty minutes, her temperature was 105°, and her pulse was of such rapidity that it could hardly be counted. A three-minim capsule of amyl nitrite was inhaled at 3 P.M. The next fit, which occurred about ten minutes afterwards, was certainly less severe; this was followed by two more at about the usual interval of still lessened severity. Another capsule was inhaled at 4 P.M.; after this she had one slight fit and partially recovered consciousness; she then fell into a heavy sleep, in which state she remained until 7 A.M. the following morning, when she woke up, feeling dazed and sore all over, but otherwise well. The temperature fell to 101° at 8 P.M. The same evening and the next morning it was subnormal. A symptom occurred which I believe was first pointed out by Charcot; she developed a bedsore over the sacral region during the attack, which, however, healed up in about a fortnight under appropriate treatment. The action of the amyl nitrite in this case was most marked and undoubtedly saved her life. I remember seeing a somewhat similar case, of which I have unfortunately lost the notes, of a young girl aged nineteen years, who had been many hours in the epileptic state and in which the action of the drug proved equally efficacious.

Cairo.

A CASE OF VOMITING LARGE MASSES OF CANCEROUS MATTER.

BY WILLIAM O'NEILL, M.D. ABERD., M.R.C.P. LOND.

ON Feb. 24th, 1896, I was asked by Dr. McDade of Lincoln to see a patient with him who was suffering from hæmatemesis. I found an emaciated man aged sixty years, extremely anæmic, and bordering on a state of syncope. He complained of pain and tenderness in the epigastric region, where manipulation discovered the stomach to be enlarged. The patient had been twice sick that morning and the vomited matter was kept for inspection. It consisted of a quantity of blood, mucus, and numerous bits of carcinoma of the colloid kind. There were three of these bits so large that the man's wife said that if she had not pulled them out of his throat he certainly would have been suffocated. The cancer thrown up was from eight to ten ounces in weight, and no doubt had so filled the stomach that space for food must have been very much curtailed. On exploring the vomit we found a ring of cancer about an inch and a quarter in diameter and of firm and tough consistency. The ring was of a dark colour and formed a marked contrast with the rest of the growth, which was of an amber tint. It had probably encircled the pyloric orifice of the stomach, and the hardness and smoothness of the lumen of the ring were caused by the food passing into the duodenum. The ring also formed the boundary of the cancer in that direction, and helped to show the unsuitableness of the duodenum for growths of this kind. The cancer grew from the pyloric end of the stomach, and I am inclined to think that it had assumed a cauliflower shape, the stem of which ultimately gave way to the energetic action of the healthy part of the stomach and to the abdominal muscles. This patient's gastric ailment began in January of last year with an attack of hæmatemesis, and from that time to this he has suffered more or less from pain and indigestion.

The expulsion of the tumour has had its good effects, for instead of the patient sinking, as was anticipated, he rallied and is daily improving. The treatment consisted of an astringent and sedative mixture and nutritious enemata solely for the space of twelve days. The patient is now, however, taking food by the mouth, which causes neither pain nor inconvenience of any kind. After the emesis of the cancer the long rest to the stomach was, I think, of great advantage to it, for the repose enabled it to contract into something like its normal limits and also to regain much of its natural powers of digestion. In cases of cancer of the stomach small portions of morbid growth may be vomited from time to time, but cancerous matter ejected from the stomach in large quantities is, in my experience, of so rare an occurrence that I venture to record this case.[1]

Lincoln.

HYPERPYREXIA IN THE PUERPERAL STATE.

BY W. F. OAKESHOTT, M.D. BRUX., M.R.C.S. ENG., D.P.H. LOND.

I HAVE recently had under my care here a case which I thought might be worthy of recording. A woman about twenty-six years of age, having three children, was taken in labour on April 12th. The labour was natural,

[1] We trust that the author will give us details of the sequel of this remarkable case when it is completed.—ED. L.

lasting about twelve hours, but the membranes were partially adherent and had to be removed by the hand. There was slight hæmorrhage. The patient slept well after all was over and said she felt all right next day. The day following, while her husband was away in the country, two Kaffirs in the kitchen had a quarrel and the Kaffir girl ran into the room with her face cut and bleeding, giving the patient a considerable shock. That evening she complained of headache and her temperature went up to 102° F. Next day, after a dose of castor-oil had acted, she felt better and the milk appeared pretty freely, but the temperature still kept up to 101°. I may mention that from the first she had vaginal injections of 1 in 2000 corrosive sublimate solution night and morning. On the fourth evening she had a rigor and the temperature rose to 104·6°, but fell again under quinine, &c., to 102°, at about which point it remained in spite of treatment till the seventh morning, when the patient had another rigor, and the temperature rose to 104°. The discharge was very slight, but not in the least degree offensive, and the milk had practically stopped. There were no signs whatever of local trouble, and no pain or tenderness whatever except headache and general malaise. The patient's condition, however, I thought, justified me in washing out the uterus, which I proceeded to do with corrosive sublimate solution; a few small pieces of membrane only came away. The patient was then made comfortable and I left. In half an hour's time I was called hurriedly and I found the patient in the middle of a very severe rigor, which lasted about ten minutes. The temperature had gone up to 108·2°. The rigor was followed in about ten minutes' time by an attack of epileptiform convulsions, which lasted about five minutes. A ten-grain dose of quinine had meanwhile been retained and another was then given. The temperature fell pretty rapidly, and two and a half grain doses of quinine every two hours were kept up till the evening, when the temperature had fallen to 100°. There is practically nothing to record after this, as the patient had no return of the fever and made an uneventful and complete recovery and has had no trouble since. The patient is a highly neurotic woman, who worries a great deal, and in my opinion domestic worry and the shock were the starting point of the fever, which antipyretics, though used freely, failed to combat altogether. I suppose that the rigors, hyperpyrexia (which was confirmed by a second clinical thermometer), and the convulsions were due to reflex irritation from washing out the uterus, although I think that the subsequent progress of the case showed it was the right thing to do. I thought the case worth recording from the extremely high temperature and the occurrence of epileptiform convulsions, as well as from the the ultimately good result obtained by the uterine irrigation.

Lydenburg, S.A.R.

LITERARY INTELLIGENCE.—With the October issue *Science Progress* is converted into a quarterly review instead of appearing monthly as heretofore. With the conversion the review is enlarged and the price slightly increased. The October number leads off the new series with some important articles on Scientific Weather Forecasting, by G. J. Symons, F.R.S.; The Natural History of Igneous Rocks, by Alfred Harker, M.A., Fellow of St. John's College, Cambridge; Visceral and Allied Nerves, by T. Grigor Brodie, M.D. Lond., Lecturer on Physiology at St. Thomas's Hospital; and Teratology of Modern Botany, by K. Goebel, Ph.D., Professor of Botany in the University of Munich, &c. Simultaneously with its conversion into a quarterly the editorial and publishing offices of the review are transferred to the new premises of the Scientific Press, Limited, at 28 and 29, Southampton-street, Strand, W.C.—Miss Florence Haig-Brown is the author of a small book on Elementary Physiology which will be published in a few days by Messrs. J. & A. Churchill. The preface is written by Dr. Ord, senior physician to St. Thomas's Hospital, who says: "The qualities of the book will, I am well assured, command the success which I most heartily wish for it."—Another work is also nearly ready for publication by the same firm, "Lectures on Medicine to Nurses," by Herbert E. Cuff, M.D. Lond., of the Stockwell Fever Hospital. This work is intended for nurses who desire to master more than is contained in the usual elementary treatises.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

A CASE OF ADDISON'S DISEASE WITHOUT PIGMENTATION; NECROPSY.

(Under the care of Dr. J. B. BRADBURY.)

THE following case is of interest as one in which, though the true nature of the disease was suspected, no definite diagnosis could be made on account of the absence of one of the most characteristic symptoms—namely, pigmentation. Such cases are not unknown, but are somewhat rare in medical literature. It cannot be claimed that the absence of bronzing was owing to the occurrence of death at so early a stage that the pigmentary deposit had not time to show itself. In an annotation in the columns of THE LANCET referring to pigmentation of the skin in Addison's disease[1] we have drawn attention to some of the views which have been held as to the cause of this increased pigmentation of the body. The explanation has been offered, on the one hand, of its being due to the retention in the blood of products which the healthy suprarenals destroy, thus establishing a sort of parallelism between this disease and myxœdema; there is, on the other hand, no inconsiderable support to the view that pigmentation is under direct nervous control. We mentioned there the investigations of Professor Raymond[2] and Dr. F. Marino-Zuco of Genca,[3] and may refer our readers to their original papers. For the notes of this case we are indebted to Dr. Arthur Burton, house physician.

A man aged thirty years was admitted on Jan. 3rd, 1896. His father and mother, both over sixty-seven years of age, and five brothers and sisters were all strong and well. There had been no death in the family and there was no history of tuberculosis. The patient had never had any serious illness, but for the last ten years he had been subject to weak digestion, with pain commencing one or two hours after meals. He had been accustomed to drink about three pints of beer daily, but no spirits. In September, 1895, the pain in the epigastrium became worse, having its greatest intensity about two hours after food. Vomiting occurred frequently on getting up in the mornings and less frequently after his meals, the pain being always relieved by vomiting. For three weeks before admission vomiting had occurred about four times daily in spite of a strictly fluid diet. There had been no hæmatemesis. The bowels had acted regularly until four days before admission, during which time there had been no action. He complained of great thirst and loss of appetite. During the last six months he had lost 2st. 7lb. in weight. On admission the patient had a good complexion and was not anæmic. He was somewhat thin and the muscles were flabby, but there was no emaciation. The tongue was dry and covered with a thin white coat. There was general tenderness all over the abdomen, most marked in the upper part, but there was no spot of special tenderness and no tumour could be detected. There was no pigmentation of the skin or mucous membranes. The pulse was regular, 84 per minute, and had a very small wave and low tension. The area of cardiac dulness was normal. The heart's impulse could not be seen or felt. At the apex the first sound was very faint and the second inaudible. No sounds could be heard at the base of the heart. The lungs appeared to be healthy, and the areas of splenic and hepatic dulness were normal. The knee-jerks were exaggerated, but equal. The urine was normal. During the first week in hospital his temperature remained normal, he complained of constant aching pain across the upper part of

[1] THE LANCET, July 23rd, 1892, p. 213.
[2] Archives de Physiologie, July, 1892.
[3] Gazetta degli Ospitali, July 9th, 1892.

the abdomen, and vomiting occurred about once a day without any apparent relation to the time of taking food. The bowels were obstinately constipated. In the next three days the temperature fell to 97°F. and the patient became much weaker, complaining also of aching pains in the legs. On Jan. 13th the pulse became imperceptible at the wrist, and death suddenly occurred while he was being assisted to change his position in bed. His diet had consisted of milk, beef-tea, Valentine's meat juice, and brandy, and attempts were made to combat the sickness and constipation by means of an acid mixture containing nux vomica and by enemata.

Necropsy.—At the necropsy, made by Dr. Lazarus-Barlow, each suprarenal body was found to be enlarged and adherent to the surrounding parts. These glands were thickly studded with tubercles of the size of peas, some of which had softened in their centres and contained pus. On microscopical examination the normal structure of the gland was obscured by the presence of much young fibrous tissue surrounding the tubercles. There was no apparent implication of the solar plexus, and all the other organs were normal and free from tuberculosis. No pigmentation could be found either on the skin or mucous membranes.

PLYMOUTH BOROUGH ASYLUM.

A CASE OF CARCINOMA OF THE SUPRARENAL CAPSULE; NECROPSY.

(Under the care of Mr. ARTHUR N. DAVIS.)

THE suprarenal capsules are not often affected with new growths, especially primary new growths, and of the more malignant tumours carcinoma is probably the most rare. Their increase in size is sometimes accompanied with pain. The occurrence of such a disease is more likely to be overlooked in lunatics than in other classes of patients, as their tendency is to hide symptoms which would be complained of by the sane.

A female patient aged thirty-two years, unmarried, was admitted into the Plymouth Borough Asylum on May 21st, 1895, suffering from simple mania. She was described by her father as never having been as bright or intelligent as the average child, and as being of a retiring disposition. Her maternal aunt committed suicide. Two months previously to admission it was noticed that the patient was strange in manner, rambled in conversation, chiefly on religious topics, and at times talked of lovers and marriage. Hair commenced to sprout on her upper lip, cheeks, and chin, and on her body quite a luxuriant crop appeared; her face was shaved at times, much to her mental distress. After trying a change of air and bromide of potassium in large doses she became worse and was admitted to the asylum in a dazed and incoherent mental state and suffering from marked anæmia. There was no apparent disease of the respiratory organs, but her kidneys acted badly, her bowels were constipated, and menstruation was suppressed. The patient occasionally complained of pain in her side, but no cause for this could be detected. She became dirty in her habits and, in spite of tonics and careful dietetic management, grew weaker, this being much aggravated by the occurrence of four distinct epileptic fits. Subsequently her pulse became extremely rapid, her body bathed in perspiration, and exophthalmos was evident. There was no unusual rise of temperature, but it remained slightly above normal until death took place exactly three months after admission.

Necropsy.—At the necropsy, which took place forty-two hours later, the body was found extremely emaciated and it quickly decomposed. Hair almost completely covered the lower, and in a less degree the upper, extremities, the face having a thinner covering and the scalp least of all. The calvarium was normal, the Pacchionian bodies were numerous, and there was a spicule of bone the size of an almond in the tentorium cerebelli. The heart and lungs were normal. Of the intestines the stomach, spleen, and pancreas were normal, the kidneys peeled badly, the left suprarenal capsule was normal, but the right was found converted into a mass of soft coarsely lobulated growth of yellow colour. Secondary growths also were found in the right lobe of the liver and in nodular form had begun to infect the left lobe. The liver weighed 6 lb. and the right suprarenal capsule 1 lb. 8 oz. On submitting the tumour to the Research Association they sent the following report:—"The specimen consists of a large oval tumour, which has replaced the right adrenal body. It measures five inches in length, and nearly five inches in its greatest width, which is at its lower end; in thickness from before backward it is about three inches. At the upper right hand corner of the preparation (as viewed from the front) there is a portion of the inferior vena cava adherent to the tumour. A polypoid mass of new growth and blood clot protrudes into the vena cava from the orifice of a large vein which issues from the tumour. This is probably the main adrenal vein. The tumour is somewhat bean-shaped, being flattened posteriorly and convex in front where it is partly covered with peritoneum. The cut surface of the tumour displays a tough capsule, enclosing a spongy white new growth. None of the original tissue of the adrenal body can be discerned."

Remarks by Mr. DAVIS.—Histologically the tumour must be called a carcinoma. The firmer parts of the specimen showed elongated alveoli, separated by large capillaries and with a very scanty stroma. Being arranged more or less regularly in parallel lines the structure recalled that of the zona fasciculata in the normal adrenal. The cells in the alveoli were large, granular, and fatty. Extensive areas of the growth had been destroyed by caseous degeneration and by extravasation of blood. Some of the larger vessels of the growth were blocked by thrombosis. This might have been started by the invasion of the vessels by the growth. The specimen by request has now been presented to the museum of the Royal College of Surgeons of England.

Reviews and Notices of Books.

The Laboratory Text-book of Public Health. By WILLIAM R. SMITH, M.D. Aberd., D.Sc., F.R.S. Edin. London: Henry Renshaw. 1896.

OWING to the importance that is very properly attached to the medical student becoming a diplomate in public health special works have been written as a guide to the study of the practical side of the subject. The book before us is the most recent addition of this kind and one which ought to be valuable since it is written by the Director of the Laboratories of State Medicine in King's College, whose experience in public health matters must be recognised. We find no particularly novel method in the treatment of the subject. The book consists merely of a collection of those processes which candidates for public health diplomas need to know. The reader, however, is not enlightened in the smallest degree as to the significance of the results. For example, he is told precisely enough how to estimate the ammonia (both saline and albuminoid), chlorine, nitrates, &c., in a given sample of water, but how these results are to enable him to decide as to the quality of the water under examination for drinking purposes we find absolutely no guide. In the directions given for the determination of the free ammonia we find—as is too often the case—that the precaution to first distil water in the still until the distillate gives no evidence of free ammonia is ignored. Apparatus that is kept in the laboratory for even a short time soon gets coated with a film of ammonium salts which ordinary washing does not entirely remove. The only satisfactory plan is to distil some distilled water through the apparatus until the distillate is shown to be quite free from ammonia, and then, and not until then, to test the water under examination. While we take some exception to a portion of the chemical part of the work we cannot fail to appreciate the excellent sections on the physics of the subject and on microscopical and bacteriological examination. The section on microscopical examination is accompanied with some really good photographs of the starches, while the bacteriological section has had the advantage of being revised by Dr. Cartwright Wood. This

latter section includes the bacteriological examination of water and of air, the chief methods of examination being adequately described. To this section are added the methods used for the bacteriological diagnosis of diphtheria and tuberculosis and the examination of sputum.

The frontispiece plate represents one of the laboratories of State medicine in King's College, but we fail to see what useful instruction it conveys. The laboratory is depicted as tenanted by four individuals, but beyond the ordinary appointments of a bench supplied with the usual laboratory appliances the picture possesses no striking feature.

So far as regards the processes with which the student is expected to be practically familiar the book may be recommended, but we think that it is not enough for the student to know how the processes are conducted, he should also be enabled to realise the significance of the results. Judging from this important point of view the book in certain sections will, we fear, afford him little assistance.

Rheumatism, its Nature, its Pathology, and its Successful Treatment. By T. J. MACLAGAN, M.D. Edin. Second Edition. London: Adam and Charles Black. 1896. Price 10*s.* 6*d.*

THE service which the author of this monograph rendered to practical medicine when twenty years ago he introduced to notice the salicin treatment of acute rheumatism entitles us to receive all that he has to say upon this disease with attention and respect. It is well known that he based his advocacy of this remedy—now universally employed almost as a routine prescription—upon the pathology of rheumatism, which seemed to him to best concord with the circumstances of its origin and the character of its symptoms. In this work he discusses in detail the various leading hypotheses regarding the nature of the disease, but dismisses the lactic acid theory and the neurotic theory as inadequate, the latter because it does not postulate a specific poison, and the former because it seeks for a generation of this poison in nutritional changes within the body. The evidence, he thinks, points to an introduction into the system of a poison generated outside the body, and by analogy rather than by actual evidence he concludes that rheumatism ought to rank among the miasmatic diseases. There is much, no doubt, to be said for this view, but that it is sufficient to explain the whole range of phenomena in acute rheumatism is not so certain. Since the first edition of this work appeared there have been other attempts made to assign to this disease its rightful place in the nosology, and in particular may be mentioned the arguments advanced by Dr. Newsholme in favour of its inclusion in the zymotic class as expounded in the Milroy Lectures delivered before the Royal College of Physicians of London last year.[1] Nor can we find that the author has dealt with the facts then advanced by Dr. Newsholme, which have attracted attention in many quarters. Indeed, it would seem as if Dr. Maclagan, having possessed himself of a working hypothesis to explain the efficacy of salicin and its derivatives, was unable or unwilling to entertain the idea that this action of the drug may be explained in any other way. There is no gainsaying the fact, however, that he makes out a very good case in favour of his views. Having pointed out the clinical and pathological analogies between malarial fever and rheumatic fever, he utilises the same process of reasoning in their relative therapeutics. The action of quinine in the former is compared with the action of the salicyl compounds in the latter, and this shows how there is no escape from the conclusion that the rheumatic poison is neutralised by the one drug in a manner as striking and as potent as the malarial virus is by the other. That the administration of the salicylates is not effectual in arresting the progress of endocarditis does not militate against their being strictly anti-rheumatic in origin. Endocarditis once set up—and it is one of the earliest and most constant effects of the rheumatic poison—is maintained by the mechanical conditions of the cardiac valves, and no remedy can be expected to combat them. At the same time, the principle of rest—i.e., of reduction in the frequency of the cardiac contractions—cannot fail to diminish the liability to extended mischief Dr. Maclagan is persuaded—and no one has more right to express such an opinion—that if it were possible to administer the remedy early enough the supervention of endocarditis might be anticipated. But, unfortunately, the physician cannot begin to treat a case before its symptoms arise. Although, then, there may not have been much diminution in the amount of cardiac valve disease due to rheumatism since the introduction of this treatment, yet we are confident that there has been less pericarditis and certainly less hyperpyrexia, just as there has been a most striking curtailment of the duration of the fever and an equally striking diminution in arthritis. It must not be supposed that this work is confined to the subject of the salicin treatment. It is, on the other hand, a fairly complete exposition of the clinical and pathological history of acute rheumatism, clearly set forth and written in a style which is readable and instructive. The book is one well worthy of perusal, and we congratulate its author on having produced a second edition.

[1] THE LANCET March 9th and 16th, 1895.

Chemistry in Daily Life. By Dr. LASSAR-COHN. Translated by M. M. PATTISON MUIR, M.A. London: H. Grevel and Co., 33, King-street, Covent-garden, W.C. 1896. Price 6*s.*

WE like this book, and every page proves to be interesting reading. Our wonder is that it did not appear in the English language at an earlier date. Still more are we surprised, nay, disappointed, that we have waited so long only to find that a translation of a German work has at length filled the important gap. Surely "Chemistry in Daily Life" is a subject upon which several of our leading chemists could have written an acceptable and a modern work. However, in the present instance we have no reason to complain of the work of the translator. It is admirably done and in a language easily understanded of the people. "Chemistry in Daily Life" embodies the substance of a course of lectures delivered by Dr. Lassar-Cohn, Professor of Chemistry in the University of Königsberg, to a society in that town, modelled on the celebrated Humboldt Academy of Berlin. The scope of subject, considering the dimensions of the volume, is remarkable. Thus in twelve lectures the following manifold subjects are treated: Lecture I. deals with the chemistry of the breathing process, including the analysis of air, an account of argon, the chemistry of combustion, introducing matches and phosphorus; Lecture II. discusses the nature of flame, involving an account of candles, petroleum, fats, the elements, the tetravalency of the carbon atom, chemical formulæ, atoms, and molecules, distillation, coal gas, &c.; Lecture III. contains an excellent and clear discourse upon the food of plants, manuring, the value of nitrogen and phosphates, food of men and animals, digestion experiments, &c.; Lecture IV. (the same subject continued) treats of mixed diet, margarine, fruits, sugar, common salt, bread, and the importance of cooking; Lecture V. relates to the quantity of food that must be consumed, the nutritive value of the foods, fermentation, and the composition of wines and spirits; and Lecture VI. is devoted to vinegar, and in the same section gunpowder, dynamite, cordite, wool, silk, &c., are also treated. The remaining lectures are devoted

to technico-chemical subjects, which, however, are described in the simplest of terms, and in a way which will be readily grasped by the non-technical reader. In the chapter on the noble and base metals the author alludes to bi-metallism, the idea of the introduction of which, being in a position to know the whole difficulties of the subject, he repudiates. Bi-metallism he regards as a mystical word which appears to convey to the public the idea of direct personal enrichment, but, as he asks, "Did not some of the troops who were at St. Petersburg in 1826 at the enthronement of the Czar shout 'Long live the Constitution' instead of 'Long live Constantine,' because they had been told that the name of the new monarch was 'Constitution'?" As will be gathered, the book deals with a very wide variety of interesting subjects, and the English public have no excuse for not interesting or educating themselves on a subject of growing importance on the ground that they cannot read for themselves.

Commercial Organic Analysis. By ALFRED H. ALLEN, F.I.C., F.C.S. Second Edition, Revised and Enlarged. Vol. III., Part 3. London: J. & A. Churchill. 1896. Price 16*s*.

WHEN Mr. Allen's important work is finished he will have earned the gratitude of chemists, analysts, and others for having added one of the most valuable books of reference on the subject with which it deals, inasmuch as it will provide practically the only work dealing collectively and, we may add, reliably with this important and now extensive branch of practical chemistry. The present volume is in reality an extension of the previously issued one which was devoted to the aminès and ammonium bases and the alkaloids; but there were left over "a number of vegetable bases which are of interest or importance from their employment in medicine, their marked poisonous character, or their occurrence in condiments." The non-basic vegetable bitter principles, animal bases, animal acids and cyanogen and its derivatives are, however, dismissed in the present instalment, so that the consideration of proteids and albuminoid compounds will be reserved for the concluding and last volume. Mr. Allen confesses that much of the matter in the present contribution is scarcely such as might be expected to be contained in a work purporting to treat of commercial analysis, but he thought it better to include all facts possessing for himself at least an analytical or practical interest, believing that what he found useful would also be of value or interest to others. We entirely concur with him in this view, although, perhaps, we may be pardoned for thinking that the last two volumes possess a stronger interest from a purely medical point of view. We have not met with a more complete account of the alkaloids and the other essential constituents of vegetable substances. On this account there is much of considerable interest to the student of medicine in the present volume. Thus, we find that in the section on animal bases the basic urinary products, including urea, xanthine, and creatin, are described, while the concluding portion is devoted to the chemistry of putrefaction and the detection and isolation of ptomaines. The bases of cod-liver oil are discussed in the same section. The consideration of the animal acids in the succeeding chapter leads again to the chemistry of urinary products, the analysis of calculi, the biliary acids, and the examination of the gastric juice. The volume concludes with a section on cyanogen and its derivatives, which is written fully up to date, since we find a fairly complete account of the new processes employed for the production of cyanides and of the methods in use for assay of cyanide liquors used in the extraction of gold by lixiviation from its ores.

The book bears the same evidence of thorough work and revision as did its predecessors, and in addition to supplying an analytical guide to the subjects it embraces it affords also information of a kind that is constantly being sought.

Dictionary of National Biography. Edited by SIDNEY LEE. Vol. XLVII. Puckle—Reidfurd. London: Smith, Elder, and Co. 1896. Price 15*s*.

THE most notable historical personage in the present volume is probably Sir Walter Ralegh, who was for more than ten years the favourite of Queen Elizabeth and distinguished himself alike as man of letters, politician, soldier, sailor, and geographical explorer. He was born in the south of Devonshire about 1552 and was executed in 1618, during the reign of James I., on a charge of treason which had been tried in 1603. The biography of him is the work of two authors—Professor J. K. Laughton and Mr. Sidney Lee, by whom he is described as "having, first of Englishmen, pointed out the way to the formation of a greater England beyond the seas. ..... The spelling Ralegh (pronounced Rawley) is that which he adopted." But the name has been written in about seventy other ways.

The medical men of whom an account is given in these pages are forty-one in number and include a few whose names are familiar even to the most junior members of the profession at the present day. John Radcliffe was born at Wakefield in 1650, went to University College, Oxford, studied medicine and graduated as M.D. in 1682. He at first practised in Oxford, but in 1684 moved to London, where he settled in Bow-street and speedily attained both fame and fortune. In 1686 the Princess Anne chose him for her physician, and although she cancelled the appointment in 1695, being offended by the brusqueness of his manner, he nevertheless was in frequent attendance on William III. and Queen Mary. He became a Fellow of the College of Physicians in 1687, and was also a governor of St. Bartholomew's Hospital. He declined a baronetcy which was offered him by the King. Princess Anne eventually succeeded to the throne, and when she was seized with her last illness in 1714 Radcliffe was sent for, but excused himself apparently on insufficient grounds, a proceeding which brought upon him much hostile criticism. He died in 1714, a few months after the queen, and was buried in Oxford; he was never married. Radcliffe was inclined to roughness in his manner, but he possessed several excellent qualities and enjoyed a practice so lucrative that before he had been in London a year he was said to have made more than twenty guineas a-day, and in 1707 he was worth £80,000. He was a most munificent benefactor of Oxford University, large sums having been given by him to University College during his life, and by his will property was left to the same college in trust for the foundation of two travelling fellowships (they are now University Fellowships) for the purchase of perpetual advowsons for the members of the college, for enlargement of the college buildings, and for a library, which latter was completed in 1747. From other portions of his bequest the Radcliffe Infirmary and Observatory were built and St. Bartholomew's Hospital was enlarged. Charles Bland Radcliffe was born in Lincolnshire in 1822, and graduated at London University as M.D. in 1851. He was elected a Fellow of the Royal College of Physicians of London in 1858, was Gulstonian lecturer in 1860, Croonian lecturer in 1873, and censor in 1875–76. In addition to two treatises on epilepsy he wrote several medical works of a speculative and metaphysical character. He died in 1889. His younger brother, John Netten Radcliffe, who was born in 1826, and served as a surgeon in the Turkish army during the Crimean War, was a distinguished authority on epidemiology and all questions pertaining to public health. In 1865 and 1866 he was engaged in investigating outbreaks of cholera both in foreign countries and in

London; in 1869 he was appointed public health inspector by the Privy Council; and in 1871 he was made assistant medical officer of the Local Government Board. He retained this appointment till 1883 and died in 1884. George Owen Rees was born at Smyrna in 1813. He studied medicine at Guy's Hospital and at Paris, and finally at Glasgow University, where he graduated as M.D. in 1836, and at once commenced practice in London. He was elected a Fellow of the Royal College of Physicians of London in 1844, was Gulstonian lecturer in 1845, censor in 1852–3, Croonian lecturer in 1856 and 1858, senior censor in 1863–4, and Harveian orator in 1869. Dr. Owen Rees was one of the first who studied the chemistry of the urine, his earliest papers on which subject appeared in 1833. His other published works include treatises on the analysis of blood and urine and the diagnosis of Bright's disease, together with articles on the structure of the blood corpuscles and on lymph, chyle, and milk. He died in 1889. Francis Henry Ramsbotham was born in 1801, received his medical education at the London Hospital, and in 1822 graduated as M.D. at Edinburgh University; in 1844 he was elected a Fellow of the Royal College of Physicians of London. He was obstetric physician and lecturer on obstetric and forensic medicine at the London Hospital. His principal published work, and that on which his reputation rests, was the Principles and Practice of Obstetric Medicine and Surgery, the fifth edition of which appeared in 1857. Dr. Ramsbotham died in 1868. Three Quains figure in this volume. Jones Quain was born in Ireland in 1796, and studied medicine in Trinity College, Dublin, graduating there as M.B. in 1820 and M.D. in 1833. Having come to London in 1825, he at first taught anatomy at Mr. Tyrrell's school in Aldersgate-street, and in 1828 published the work on the Elements of Anatomy, which has become the standard English text-book on the subject; the tenth edition, in three volumes, appeared in 1890. From 1831 to 1835 Quain was Professor of General Anatomy at University College. He died in 1865, the last twenty years of his life having been spent in the leisurely cultivation of scientific and literary pursuits. Among Jones Quain's pupils at Aldersgate-street was his brother Richard Quain, who was born in 1800 in county Cork. In 1828 Richard Quain became a Member of the Royal College of Surgeons of England, and in 1832 he was appointed Professor of Descriptive Anatomy at University College, a post which he held until 1850. He also received the appointment of assistant surgeon to University College Hospital in 1834, and was full surgeon from 1848 to 1866. When the Fellowship of the Royal College of Surgeons of England was estalished in 1843 Quain was among the first recipients of the new distinction. He was elected President of the College in 1868 and delivered the Hunterian Oration in 1869. He died in 1887, having bequeathed to University College the bulk of his fortune, amounting to about £75,000. Besides bringing out the fifth edition of his brother's Elements of Anatomy in 1848 he published The Anatomy of the Arteries of the Human Body, The Diseases of the Rectum, and Clinical Lectures. Another of the medical worthies who have found a place in the pages of the dictionary is Dr. John Rae, well known to geographers by his explorations of the frozen shores of North America and his recovery of relics of Sir John Franklin's Polar Expedition. He was born in one of the Orkney Islands in 1813, became qualified as a surgeon in Edinburgh in 1833, and immediately entered the service of the Hudson's Bay Company. He was a member of the expeditions sent in search of Sir John Franklin in 1847 and 1850. A boat expedition sent out by the Hudson's Bay Company in 1853 with Rae in command obtained relics of Franklin from the Eskimos in May, 1854; and on the return of the party to England they were found to be entitled to a reward of £10,000 offered by the Government to those who first brought back definite news respecting Franklin. Rae's last years were mostly spent in London, and he died there in 1893. Sir John Richard Quain, a Judge of the Queen's Bench, half-brother of the two distinguished medical Quains and cousin of the present President of the General Medical Council, is the third of his name who finds a place in this volume, as does Dr. Francis Hopkins Ramadge, from whose biography the most distinctive facts have been omitted. This may be kindness, but it is not history.

New Inventions.

TWIN TANK EAR SYRINGE.

ALL who have had any practice in aural surgery will have felt the inadequacy of the old ear-syringing apparatus, which has, I believe, remained unchanged for a great number of years. Feeling this, I suggested to Messrs. Reynolds and Branson of Leeds the idea of an improved instrument, which they have now brought out under the

name of the "Twin Tank Ear Syringe." The advantages are that the waste must go into its receiver, and not down the patient's neck and clothes; the operator has both hands at liberty; and the patient can sit in an easy instead of a constrained position—in dealing with children this is most advantageous. It is most compact and more portable than any we have had in use heretofore, the whole fitting as it does into the metal tank.

J. J. JACKSON, L.R.C.P. & L.M. Edin., &c.

East Ardsley, Yorkshire.

THE President and Council of the Society for the Study of Inebriety have issued invitations to a reception at which Professor G. von Bunge, Professor of Physiological Chemistry in the University of Basle, will be present. The reception will be held in the rooms of the Medical Society of London, 11, Chandos-street, Cavendish-square, W., on Thursday afternoon, Oct. 8th, 1896. Dr. Norman Kerr will take the chair at four o'clock, when a paper will be read by Dr. Wm. Huntly, late of Rajputana, on "The Opium Habit; some points in Diagnosis and Prognosis." Ladies will be present and tea and coffee will be served before the meeting.

THOMAS WAKLEY,

THE FOUNDER OF "THE LANCET."

A BIOGRAPHY.[1]

CHAPTER XXXVIII.

More Cases of Ill-considered Verdicts.—Wakley's Claims on the Coronership.—A Vacancy for West Middlesex.—Wakley's Precarious Pecuniary Position.—He Resolves to Compete.—The Boundaries of the West Middlesex District.—The Opposition of the Middlesex Magistrates.—A Hollow Victory for the Medical Candidate.

DURING the next ten years Wakley kept his contention that the peculiar fitness of medical men for the post of coroner must end in the medical coroner being a very usual officer in every county persistently present to the minds of his readers. A large quantity of correspondence detailing instances in which coroners' verdicts had been improperly obtained through failure to provide adequate medical testimony or failure to appreciate such testimony when offered was inserted in THE LANCET, and each communication of this nature received caustic comments from the editorial pen. "Incapacity of an attorney," "Gross case of misdirection to a jury," or "Verdict in the absence of medical testimony" were frequent headings to notes and even leading articles, and this is not surprising when some of the examples of the verdicts returned at inquests are examined. In an inquest, for example, held on the body of a woman who had died from *cholera*, the jury, under the direction of the coroner, returned a verdict of *manslaughter*. The testimony of four medical men who had examined the body availed nothing against that of three children, one of whom stated that the deceased was "knocked over" an iron railing, while a second asserted that she was "pushed against" an iron railing, and a third, omitting the railing, swore that the victim was simply knocked about. Again, a youth fifteen years of age had been "knocked against a wall, struck very violently right and left on the head, then dashed upon the pavement, and kicked by his assailant, an active, strong man, several times. On struggling to his feet he was again knocked down." The after-history of the case was very clearly given on sworn evidence. The lad went home, vomited blood, and during the next week complained of pain in the head and stomach. He continued to vomit frequently for the next month, and four weeks and five days after the assault died under the care of the parish medical officer. The necropsy revealed considerable laceration of brain substance and the commencing formation of an abscess in the left ventricle. The jury after hearing the evidence were anxious to bring in a verdict of manslaughter. They were over-ruled by the coroner, who informed them that if they did the parish would be put to an expense of £100 to £150, and probably the man would be acquitted after all. A verdict therefore was returned of "Died from extravasated blood in the brain, but the jury are not satisfied that it arose from natural causes."[2]

Again, a woman who was known to have fractured her second and third cervical vertebræ was said by the coroner's jury, unassisted by any medical evidence, to have died from apoplexy.[3] Any one of these cases would have gone far to prove that Wakley was right in talking of the coroner's inquest as held by too many coroners as a "meagre, miserable, and worthless" institution. He was known to be hunting for such cases; but discounting all his weighty bias in the matter, their very existence proved that the coroner's inquest was not the safeguard that it should be. That Wakley collected his examples of malpraxis and that they formed but a small fraction of the number of inquests which were properly conducted and which, after due deliberation, ended in the return of a correct verdict was quite well recognised, but the bare fact that one such case of gross error could occur proved the coroner's inquest to be no very real security to the public. In Middlesex, at any rate, Wakley made certain of the popular vote for any future occasion by the publication, generally with full names and dates, of these cases.

In other directions his claims to the next vacant coronership, if he cared to apply for the post, grew very manifest. He had fought a gallant fight in his attempt to obtain the coronership of East Middlesex. He had resisted on his election to Parliament several obnoxious measures dealing with the privileges of the coroner, and in 1836 he had framed and carried the Medical Witnesses Remuneration Bill. Until the passage of this measure it had been open to disputants of his theory that the medical man made the best coroner to retaliate that medical men often might attend inquests and throw valuable light on the cause of death and thus strengthen the hand of the non-medical coroner, but that they wriggled out of these duties because there was no provision made for their remuneration. This could not be contradicted because THE LANCET contained records of cases where the coroner had been unable to charge his jury properly since he could not find anyone to make a necropsy for him. In country districts where the medical man and the coroner were well known to each other it was deemed by many coroners not only to be no slight but a piece of kindly consideration not to summon a medical witness. He could not be paid, therefore why trouble him? Wakley's Act removed the difficulty under which both coroner and medical man laboured. The coroner would no longer have any scruple about summoning a medical witness, and the medical man would receive some return for his services to the court. According, then, to persons of the opposite way of thinking to Wakley matters after 1836 should have gone perfectly smoothly. Wakley's own Act should have nullified the necessity for medical coroners by providing an adequate supply of paid medical witnesses. But nothing of the sort occurred. Wakley's Act put large sums of money into the pocket of the medical profession, but it did not save the non-medical coroner from his blunders. Cases where no medical men were called as witnesses were just as numerous as before, but whereas the previous absence of medical evidence may have been partly due to voluntary abstention of the medical profession, it was now due to economy on the part of the coroner. The county authorities when auditing the county accounts were apt to refer very strongly to the payments made to medical witnesses, saying with the positiveness that goes hand-in-hand with ignorance that when the cause of death was very evident it was absurd to put the public to expense in ascertaining the cause from a medical man. Many lay coroners listened to these grumblings with too open an ear and preferred to risk misdirecting a jury to submitting themselves to the blame of the county authorities, and as a result some of the cases which occurred in the courts of lay coroners after Parliament had made provision for proper expert evidence were as flagrant as those that had been the frequent cause of previous scandal. And nothing, Wakley urged, would ever stop these cases save the appointment of medical coroners who would summon medical evidence where it was required with a practical

[1] Chapters I., II., III., IV., V., VI., VII., VIII., IX., X., XI., XII., XIII., XIV., XV., XVI., XVII., XVIII., XIX., XX., XXI., XXII., XXIII., XXIV., XXV., XXVI., XXVII., XXVIII., XXIX., XXX., XXXI., XXXII., XXXIII., XXXIV., XXXV., XXXVI. and XXXVII. were published in THE LANCET, Jan. 4th, 11th, 18th, and 25th, Feb. 1st, 8th, 15th, 22nd, and 29th, March 7th, 14th, 21st, and 28th, April 4th, 11th, 18th, and 25th, May 2nd, 16th, 23rd, and 30th, June 6th, 13th, 20th, and 27th, July 4th, 11th, 18th, and 25th, Aug. 1st, 8th, 15th, 22nd, and 29th, and Sept. 12th, 19th, and 26th, respectively.

[2] THE LANCET, 1832-3, vol. i., p. 241.

[3] THE LANCET, 1833-4, vol. ii., p. 671.

knowledge of the occasion and uninfluenced by motives of parsimony or politeness.

His second opportunity to try his chances with the freeholders of Middlesex did not come until January, 1839, when the death of Mr. Stirling on the 17th of that month caused a vacancy in the coronership of West Middlesex. Wakley was at once urgently desired by a great number of the electors from all parts of the county to become a candidate for the vacant office, and with apparent alacrity he accepted their invitation. It may be thought strange that he required to be invited before coming forward. Since his near defeat ten years previously he had resolutely stood his ground, pleaded the cause of the medical coroner, and refuted or flouted the arguments of all who were opposed to him. In his attitude during this decade he appeared to be waiting for a chance to pounce on the next vacant coronership. But in truth this was not so, and when the chance came again it found him at first doubtful of his course. His hesitation was entirely due to his pecuniary position. Money was at this time a serious question with Wakley. His conduct with regard to financial matters had always been supremely careless. Receiving money with one hand he threw it away with the other. Ever since THE LANCET had proved a success he had received large sums and spent larger. Always in difficulties, he was always hopeful and always lavish. But at this particular time, that is during the years of 1837 and 1838, he was seriously embarrassed by the frequent and heavy calls upon his purse.

The contest for the office of coroner was an exceedingly expensive affair. The times were corrupt and election work was conducted throughout by agents, of whom there were a large number employed on both sides and to whom money was given by the principals without question, only the position in the final poll being regarded. His first contest for the coronership had cost Wakley a very large—nay, an enormous sum of money. He really never knew the exact figure, but the total he believed to be over £7000. This sum had been raised through the good nature of his friends and relations in part, in part by pawning the profits of THE LANCET to certain business connexions who had from its commencement been associated with him in its conduct and were therefore cognisant of its large and increasing circulation and its substantiality as a source of revenue, and in part from the trustees of his marriage settlement. On that occasion he was, as has been narrated, just unsuccessful, and all the money had been thrown away, leaving him with a burden of debt that would have frightened a man more concerned about his pecuniary position from day to day and less obstinately reliant on his own abilities and fortunate stars. He had resolutely set to work to wipe off the debt and had in part succeeded when his three attempts to represent the borough of Finsbury in Parliament interfered with his projects of economy and raised his liabilities again to the point which they had reached in 1829. Then came success in Parliament, and hand in hand with this success came increase of income through the ever improving circulation of his journal and increase of expenditure through the purchase of the lease of Harefield Park, the more important and luxurious style of living in Bedford-square, and the support and education of a family. His father-in-law often assisted generously, particularly in discharging any liens upon THE LANCET, as he foresaw that it would be a terrible day for Wakley when the control of that property which he had created, and which his individuality and prowess had made valuable, should pass from him. His father-in-law had also helped Wakley in his parliamentary campaign. He gave him the land which allowed him to satisfy the law with regard to property qualification before offering himself to the borough electors, and he subsequently lent him or gave him considerable sums. But Wakley could not go for ever to him, so that it can be understood that he had to give the matter some little thought before accepting the invitation of certain of the free voters to be their candidate again for the vacant coronership. On the one hand, he desired the position, while the annual income, never less than £1500 or £1800, was a strong inducement to him to compete. On the other hand, a large sum of ready money had to be found immediately, while a failure to attain his object for a second time would plunge him into embarrassment that would seriously jeopardise THE LANCET and his position in Parliament. The fortune that had been spent in the previous contest, however, decided Wakley's friends again to help him. That money was irretrievably wasted if Wakley did not come forward again, whereas if he did come forward and win it could be regarded as having conduced to his success. It was made easy for him to mortgage his wife's income for £2000, which he did. He stood for the coronership and was overwhelmingly successful.

There were about 9000 freeholders in the county of Middlesex, not including the cities of London and Westminster. The western division of the county contained more than half of these—i.e., 5000 odd; but all the freeholders had the rights to vote for both divisions—a curious and anomalous state of affairs which met with Wakley's approval. The division between Eastern and Western Middlesex, speaking roughly, was the Great North-road. West Middlesex, for which Wakley now became coroner, was bounded on the west by Buckinghamshire, the following places on the border marking the extreme points of his jurisdiction: Harefield Park (his own country residence); Uxbridge, four miles south of this; West Drayton, Colnbrook, and Staines. On the eastern boundary, which was not a very direct straight line, were situated Barnet, Hornsey, Highgate, and the commencement of the Great North-road where it joined the City-road. On the north lay Hertfordshire, the bounding localities being Rickmansworth, Pinner, Stanmore, Elstree, and Mill Hill. The southern boundary was formed by the north bank of the River Thames from Staines to the precincts of the City of Westminster, the places on that bank being Shepperton, Sunbury, Hampton, Teddington, Twickenham, Isleworth, Brentford, Hammersmith, and Fulham. The division between West Middlesex and Westminster followed roughly the course of Piccadilly, the northern side being Middlesex and the southern Westminster. The division between West Middlesex and the City followed the line of the Farringdon-road.

Anyone who will allow his mind to dwell on the size of this vast constituency—it comprised over three hundred square miles and contained 200,000 more persons at that time than the eastern division of the county—and will at the same time imagine it scoured from end to end by competing agents during a poll that lasted a week will understand that the contest was one from which an impecunious man might well shrink. Wakley, however, having accepted the invitation of the freeholders, dashed for victory with characteristic ardour. He had better cards in his hand than on the previous occasion, not the least telling being his unlooked-for success in Parliament. Also, since 1829 many medical coroners—upwards of twenty—had been actually appointed in various parts of the kingdom entirely owing to his writings, and their successful administration compared favourably with some of the fiascoes reported in THE LANCET as occurring in the courts of their lay brethren. Before the polling began Wakley said that he was absolutely certain of success, and by Feb. 7th the Middlesex magistrates, the county authorities to whom the coroner would look for payment of his fees, appear to have thought so also. For they made an attempt to diminish the value of the prize now within Wakley's grasp

that was as bold in its conception as it was ludicrous in its failure. They suddenly represented to the Lord Chancellor, at the request of fifteen freeholders, that the duties of the coronership for the county of Middlesex were so overwhelmingly arduous that two men should not be asked to undertake them. The magistrates therefore prayed the Lord Chancellor to supersede the writ that he had issued for the election on Feb. 18th and to appoint that two instead of one coroner should be elected to fill the vacancy in the coronership of West Middlesex. The action of the magistrates was not creditable to their sagacity. Tories to a man, they dreaded the employment of a Radical, and in particular of a Radical who had spoken evilly of the unpaid justiciary. Wakley's only serious opponent, a solicitor named Adey, was much more after their heart. When it was seen that Mr. Adey was certain to be worsted the magistrates hoped to secure his return for half the district if they could persuade the Lord Chancellor, Lord Cottenham, to appoint two coroners. But the personal and political prejudices that had led to their action were recognised by the press, and the move was stigmatised by, among others, the *Globe*, the *Examiner*, the *Morning Chronicle*, and THE LANCET as unworthy and disingenuous. The latter it certainly was, for the work had previously been done to the apparent satisfaction of the magistrates by Mr. Stirling single-handed, and Mr. Stirling was a practising solicitor, clerk to these very magistrates, and *ninety-four* years of age! The Lord Chancellor curtly answered the memorialists that he saw no reason for acceding to their request.

On Feb. 18th polling began, and by the evening of the same day Wakley had polled 1824 votes, against 471 given for his opponent. On Wednesday Mr. Adey had still not registered much more than a quarter of the number of the votes that had been given for Wakley and on the evening of that day he retired. Strong pressure had been put upon him by Wakley's personal and political foes to contest the election to the end of the seventh day, which would have meant an enormously increased expense to Wakley, but he had the sense to refuse to accede to such malicious advice, which, moreover, would not have had the desired effect of depleting Wakley's purse, as the freeholders themselves formed a committee to defray all Wakley's future charges by subscription among them As the *Morning Chronicle* said in recommending such a fund to the public: "This is not the battle ground of Reformer and Tory, and we should deprecate its being made so. The man best able to discharge the duties of coroner is the man who ought to be elected. The freeholders of the county are manifestly in favour of Mr. Wakley; and his opponents say by their thus vexatiously carrying on the contest, 'If we cannot beat him by votes we will ruin him by expense.'" The final result of the poll was—Wakley, 2015; Adey, 582; and on Feb. 25th, 1839, Wakley became coroner of West Middlesex.

(To be continued.)

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the Committee of the Association of Fellows of the Royal College of Surgeons of England was held on Sept. 20th, Mr. C. W. Mansell Moullin being in the chair. The reading of the minutes of the previous meeting was deferred. In view of the circular to be issued by the Council to Fellows of the College on Oct. 1st, inviting the expression of their opinion upon the question of the representation of the Members of the College on the Council, the following appeal to the Fellows was unanimously adopted:—

REPRESENTATION OF THE MEMBERS OF THE COLLEGE ON THE COUNCIL.

To the Fellows of the Royal College of Surgeons of England.

A circular is now being issued by the Council of the Royal College of Surgeons of England to all the Fellows of the College for the purpose of ascertaining the opinion of the Fellows on the question of the representation of the Members of the College upon the Council. This step has been taken by the Council because at the half-yearly meeting of the Fellows held in January last a resolution was carried by a very large majority of the Fellows present affirming the principle that it is desirable to give to the Members of the College direct representation upon the Council. Feeling convinced ourselves that the time has come to set at rest a long-agitated question and to enlist in support of the College the active sympathies and cooperation of the large body of Members who now have no voice whatever in the management of the great surgical corporation which they materially contribute to maintain, by making a concession which can be productive of nothing but good to the institution, we venture to appeal to you to endorse the resolution which a very representative meeting passed with very few dissentients. The concession asked for is one which will virtually detract nothing from the privileges of the Fellows who will continue to elect twenty-four Members of Council if a few seats are added to the Council for the representation of the Members of the College. In this way the Members will secure a safe channel for the expression of their views and wishes and the Council will have the advantage of being brought into touch with the main body of its constituents. All we are concerned with now is to secure the affirmation by the Fellows of the principle of the representation of the Members, for with regard to the mode of representation—whether by Fellows or Members of the College—we do not desire here to express any opinion as we think it best to leave this detail to be determined for himself by each individual Fellow.

A communication was received from Mr. W. G. Dickinson, secretary to the Society of the Members of the College, in answer to the resolution passed by the Committee of the Association of Fellows at the last meeting asking the society to join with the Committee in inviting Mr. Walter Rivington to come forward as a candidate for the General Medical Council. Mr. Dickinson stated that owing to the dispersion of the members of the executive committee of the society for the vacation a meeting had not yet been held, but that the committee would meet on Friday, Oct. 2nd, to consider the matter, and would immediately communicate both with the hon. secretary of the Committee and with Mr. Rivington. It was agreed that an early meeting of the Committee should be held in October. This concluded the business of the meeting, and the Committee adjourned.

JENNER MEMORIAL MEDAL.

WE are requested by the Honorary Treasurer of the Epidemiological Society to publish the accompanying (first) list of subscribers to the Jenner Memorial Medal Fund. Subscriptions are limited to one guinea, and will be received by Dr. Sweeting, 6, Hereford-mansions, Bayswater, London, W.

	£	s.	d.
Dr. H. Armstrong	1	1	0
Dr. Robert Barnes	1	1	0
Mr. F. Blackwell	0	10	6
Dr. F. T. Bond (Gloucester)	1	1	0
Dr. W. A. Bond	1	1	0
Mr. M. Brownfield	1	1	0
Dr. Bulstrode (Hon. Secretary)	1	1	0
Dr. F. Clemow (Cronstadt)...	1	1	0
Dr. A. E. Cope	1	1	0
Dr. Andrew Davidson ...	1	1	0
Dr. Dickson (Constantinople)	1	1	0
Dr. Donnet, R.N.	1	1	0
Dr. W. W. E. Fletcher ...	1	1	0
Mr. Andrew Fuller	0	10	6
Mr. E. Goddard	1	1	0
Surgeon-General Gordon, C.B.	0	10	6
Mr. E. C. Greenwood ...	1	1	0
Mr. A. L. Griffiths	0	10	6
Dr. Grigg	1	1	0
Dr. S. Hague	1	1	0
Dr. Hamer	1	1	0
Dr. Hare	1	1	0
Dr. Harrison	1	1	0
Surg.-Gen. Sir Anthony Home, K.C.B., V.C. ...	1	1	0
Dr. E. O. Hopwood	1	1	0
Mr. V. Jaynes	1	1	0
Dr. J. Little (Dublin) ...	1	1	0
Mr. J. Loane	1	1	0
Dr. Longstaff	1	1	0
Dr. McVail	1	1	0
Mr. G. A. Miskin	0	10	6
Mr. T. Mitchell	1	1	0
Dr. Müller (Buda Pesth)	0	16	8
Mr. Shirley F. Murphy (President)	1	1	0
Mr. J. Norton	1	1	0
Dr. Louis Parkes	1	1	0
Dr. Franklin Parsons ...	1	1	0
Dr. Payne	1	1	0
Fleet-Surgeon Theodore Preston, R.N.	1	1	0
Dr. Pye-Smith	1	1	0
Mr. J. F. Rogers	1	1	0
Dr. Saltet (Amsterdam)...	0	10	6
Brigade-Surgeon J. B. Scriven	1	0	0
Sir John Simon, K.C.B.	1	1	0
Dr. Smart	0	10	6
Dr. Sonsino (Pisa)	0	4	0
Dr. Sweeting (hon. treas.)	1	1	0
Dr. Theodore Thomson...	1	1	0
Sir J. Tholozan, K.C.M.G. (Teheran, Persia) ...	1	1	0
Dr. Thorne Thorne, C.B.	1	1	0
Dr. Washbourn	1	1	0
Mr. S. Welch	0	10	6
Dr. Wheaton	1	1	0
Dr. Whitelegge	1	1	0
Dr. J. T. Wilson	0	10	0
Dr. Young	1	1	0
Total...	£52	18	8

THE LANCET.

LONDON: SATURDAY, OCTOBER 3, 1896.

WE present our readers once more with a synopsis of the introductory lectures. They are useful to two classes—primarily to the students to whom they are addressed, and, secondly, to that larger class in whose memory student days keep receding to an ever-increasing distance. It is all very well for those who are of a cynical turn to make light of introductory lectures and of the obvious difficulties which those who have to deliver them feel in choosing their subject and in giving their discourse a difference of form or theme that will save them from the charge of mere imitation. It is not our custom to be critical in this sense. The opening days of a session are full of interest. They succeed to days of holiday. They initiate a career. It may be a bad one, but there is far more chance of it being a good one. These days bring the first impressions of personal responsibility and isolation. The idlest and most trivial mind in such days is in a mood to receive kindly whatever the introductory lecturer has to say, and he can scarcely fail to say something that will make such a listener less idle and less trivial. For the time being the lecturer is very much in the position of a friend. He has not yet assumed the severe tone of the special teacher. He is dealing in generalities and moralities, giving lessons out of a large experience, or just lifting the curtain that conceals the great field of labour and study which is to occupy the student in the coming months. Perhaps he makes his subject more stimulating by histories of brilliant discovery or plodding and fruitful work. Whatever shape his theme takes it can scarcely fail to leave a wide impression on the hundreds of those who hear the addresses and on the thousands beyond who, in spite of the cares of practice, contrive to feel themselves students still and read the introductories as a kind of test of the survival in them of the pupillary mind.

The winter session of 1896–7 opens under somewhat proud conditions. The British Association has just dispersed from Liverpool and the echoes of Sir JOSEPH LISTER'S opening address still fill the air. At the complimentary banquet given to him by the Liverpool Medical Institution he delivered some timely remarks on medical education and the examinations of medical students which cannot be too deeply pondered by both teachers and students. But the point of chief interest for the consideration of both is the presence in the chair of our great scientific Association of a member of the medical profession, raised to that position because he himself had been a chief agent in raising medical science to a level with other sciences. This is a veritable object lesson for students entering the profession. It is a proof to them that the best minds amongst us have thoughts to spare in their behalf and for securing them good teaching and fair examinations. But it is much more; it is a proof to them that the methods of medical science are not different from those of other branches of science and that the medical art has been more advanced by thirty years of precision of observation than by 300 years of mere blind deference to authority. No wonder that several of the addresses, notably that of Dr. SIDNEY MARTIN at University College, dealt chiefly with the scientific aspects of medicine and the bearing of these on the advancement of medicine as an art. While taking the discoveries—almost casual—in reference to the thyroid gland as his principal illustration, he inevitably dwelt on the fact that the chief advance of medicine had been made in connexion with bacteriology and careful observation of the ways and powers of certain micro-organisms. Other introductory lectures dwelt on the human and social aspects of the problem of medical study. The lecturer who most accentuated this view was Mr. W. ADAMS FROST of St. George's Hospital. He said in effect: "You medical students come up to the medical profession and demand of it, sometimes even with an air of right and patronage, 'What have you to offer for our reward?' 'How easy can you make our work?'" He reversed the question. "What," said he, "have you to bring to this great and lofty calling? What sort of man are you to propose to join the profession?" This is turning the tables on the student with some severity, but with absolute propriety. This is no calling for anybody that does not know his own mind and his powers of work and self-denial. It is not even now too late for any student entering the profession to ponder this question. Success in examinations, in practice, in advancing medical research is not for the idle or the indifferent. The profession of medicine is a pursuit for the earnest and the diligent. To them it can scarcely be disappointing. Any good school will supply them with the conditions of success. According to Sir HENRY LITTLEJOHN at Sheffield provincial schools have great advantages in the closer contact between teacher and student than is practicable in the metropolitan centres of the kingdom. Be this as it may, the honest and wholesome rivalry in teaching efficiency between these centres and the provinces is all on the side of the students if he has grace to use it so. He will be much helped in this by a careful study of the addresses which we publish, not omitting the sensible reminder of Dr. W. ESSEX WYNTER at the Middlesex Hospital, that the altruistic nature of medical life is unfavourable to the cultivation of good business qualities—a defect with which medical men are often charged. There is no good reason why a medical man should neglect his own affairs or be stupid in the management of them.

The Introductory Addresses appeal, not only to medical students, but to the public, and fill a not inconsiderable space in their first October newspaper. Let us bespeak for them a kindly consideration at the hands of laymen. The profession of medicine is of enormous importance to every class of the community. It has been but lightly regarded in the past—more from want of thought than from anything worse. But this should cease now, and the public should more deeply consider its obligations to those who study life

and death (sometimes at the cost of their own lives) with most beneficial results in abating disease and prolonging life.

THE system under which medical education is carried on in London is, we believe, peculiar to the metropolis. In no other city of the world is there to be found the special kind of alliance between charitable and educational institutions that is presented here in many, although not in all, instances. There exist in London twelve general hospitals to which medical schools are "attached." In every case, with three exceptions, the school has been a later product, whose existence depends on the older foundation, to which, in its turn, the school renders inestimable service. In two instances—which arose in the third and fourth decades of the present century—hospitals were founded to afford facilities for clinical instruction to students of the medical faculties of colleges, and in the latest venture of all a medical school was established which affiliated itself to an already existing general hospital for the like purpose. Of the rest, the bond which unites the hospital and the medical school is of varying degrees of closeness. In some the school is recognised as the most important department of the hospital's domain, in others it enjoys a quasi-independence, being conducted by members of the medical staff, with the sanction and practical support of the hospital authorities, but without the latter taking more than a nominal share in its management. There is no need to particularise individual institutions or to attempt to estimate the advantages accruing from the several kinds of union that obtain between the hospitals and schools. We prefer rather to deal with the subject in its broader aspect, to inquire how the present condition of things came about, and to ascertain, if possible, whether it is to the public benefit or to the benefit of medical education that this system should continue.

It is reasonable to imagine that if a *tabula rasa* were made of the present condition of things, and London were to be re-constructed as a centre of medical study, there would be created a kind of organisation wholly differing from that now existing. Such a change would almost certainly be based upon the plan of such notable centres of medical learning as Paris, Berlin, or Edinburgh, the vast size of the metropolis alone requiring modifications in respect to the distribution of academical seats, around which our great hospitals might be grouped. But it is hardly worth while to indulge in any such Utopian visions. The medical school of London, in spite of its lack of economy in teaching resources, has attained a position worthy of the empire of which it is the centre; and when, as we trust, it comes to form part of a real university, many of its more obvious defects and redundancies may be remedied. Nevertheless it is instructive and interesting from the point of view of the history of medical education to trace the origin of the present prevailing custom. In the main it is the direct outcome of the numerous "schools of anatomy" which flourished at the beginning of the century, and in which several men of eminence held leading positions, such as the HUNTERS, BAILLIE, MARSHALL HALL, and the BELLS. But even then there were lectures given in the old hospitals of St. Bartholomew and St. Thomas, whose "schools" date respectively from the middle of the seventeenth and eighteenth centuries, whilst the medical schools of the London and St. George's Hospitals had recently come into existence. The students of those private schools consisted of pupils of the various hospitals, which they "walked" during their whole period of academical study. Gradually the old order changed. Guy's Hospital in 1826 established a school of its own; the Westminster Hospital and Charing-cross Hospital (in 1834) were not slow in following. University College had been founded (1828) and, failing to secure affiliation with the Middlesex Hospital, set to work to build a hospital for its clinical needs (1835), whilst Sir C. BELL, who had been Professor of Surgery in the college as well as surgeon to the Middlesex Hospital, created the medical school in connexion with the latter (1836); King's College hospital was established in 1840, and fourteen years later a medical school was founded in connexion with the new St. Mary's Hospital (1854). Yet in many instances the schools thus created remained as much private institutions as those which they supplanted, for although attached to the public hospital a London medical school is, as we have said, often entirely independent in its management (financial as well as educational), which is vested in the members of the hospital staff and lecturers.

With the advance of medical education in the past five-and-twenty years, and especially the extension of practical study in the scientific part of the curriculum, there have been corresponding efforts on the part of the schools to maintain themselves in a state of efficiency; and in more than one quarter it is evident that the idea is gaining ground that a medical school as a centre of technical training deserves more public recognition than it has hitherto obtained. This idea has taken practical effect within the past few weeks in regard to one of the institutions of which we have spoken, and we believe that this step is not only in the right direction, but that it will soon be followed by others. The effect of the formation of an integral union between a hospital and the medical school attached to it cannot fail to be of mutual advantage to both institutions. The school obtains the status to which it is entitled as a seat of higher education, its efforts will be more likely to gain public attention and support, and its area of usefulness will *pro tanto* be extended. The hospital, which has already reaped so much advantage from its connexion with a medical school, will gain the more in proportion as the efficiency of the school is maintained. Thus, then, if this change becomes general we may hope that the hospitals which form one of the most striking characteristics of this metropolis will derive from their recognition of the educational side of their institutions an increased amount of confidence and assistance from the general public to whose interest it is that medical education in this country should be maintained at the highest possible level.

BY the deaths of Sir JOHN ERICHSEN and Sir GEORGE HUMPHRY the profession has lost two men who in different ways have played a very prominent part in the advance of the science and art of surgery. The two men lived

for nearly the same length of time—beyond the allotted span of life; they both saw the outcome of their life-work and were able to enjoy for a short time a partial retirement from active professional work to be spent in the general esteem and affection of those whose interests they had lived to serve. Alike in so much they yet had their striking differences. In birth, in disposition, in culture, and in special interests the two men differed widely; but each has done a splendid work, has left a permanent record behind him, and an example which should prove a help and an inspiration to all. The mere accident of death within a few days of each other is not a sufficient excuse for attempting ananalysis of their characters and influence or a justification for attempting to draw subtle comparisons between them. But the memory of these men is worthy of special and reverent regard, and now that they have passed away, and the life of each tells in the main the same story, what better can we do than pause for a moment to listen to it?

ERICHSEN and HUMPHRY were busy men, whose lives were filled to the brim with all the varied cares and duties of leading teachers and practitioners of surgery. But, amid all the details and the many interests of their daily life, each kept before him one chief aim and purpose. "This one thing I do," might well have been the motto of each of them. The "one thing" differed in the two cases most widely, but the two men were alike in their singleness of devotion to one great purpose, and each had the satisfaction of seeing an abundant success crowning his years of patient effort. ERICHSEN won for himself a foremost place among English surgical writers. A thoughtful operator, and dexterous in spite of marked shortness of sight, a sagacious adviser and a firm friend to those who had once really won his confidence, it is for none of these qualities that his name will be specially honoured, but as the writer of the best surgical text-book in the English language. As a practical surgeon he easily held his own among the best, but it was not for this that he strove, nor was the work he did as a surgeon and an oral teacher his best contribution to his profession. His "Science and Art of Surgery" was his great life-work, and it is difficult to appreciate now the magnitude of the task he attempted and the success he achieved. It is forty-six years since the first edition was published. It at once took its place as the leading English surgical text-book, and to-day it holds that place as firmly and as certainly as ever. Although the whole art of surgery has been revolutionised during this period the plan of the work has needed no change. In form, though not in substance, it is the same now as at the first. Its title shows the writer's true appreciation of the nature of his task. He wrote of an art grounded upon a science. The art might change, the science advance, but the relation and mutual dependence of the two know no change, and the plan so well laid nearly fifty years ago has proved itself only more excellent as the fresh demands made upon it have had to be met. Without the charm of style that mark the writings of Sir THOMAS WATSON and Sir JAMES PAGET, ERICHSEN'S great book asserted itself by its inherent goodness. When we think how many able writers have essayed the task, often with almost infinite labour, and have failed to obtain anything like his success, and that even groups of writers with their combined talents have come short of the standard he attained, we are the more struck by the eminent service that ERICHSEN rendered to every reader of English surgery. His text-book is such an old friend that we are apt to forget, not only the labour it cost, the prescience with which his material was arranged, and the clearness with which his subject is presented, but the skill with which he founded it upon the solid rock of Truth. In many departments of surgical literature ERICHSEN did good work, and had he never planned or executed his text-book he would have filled a high place in his profession; but as the writer of that text-book he deserved, and we are glad to know that he received, the grateful regard of all students of surgery in this country and America.

Sir GEORGE HUMPHRY was a man of great talents and the happy possessor of a mind which added a subtle charm to all his teaching and work. He was in every sense of the word an admirable surgeon, learned without pedantry, wise without sophistry, skilful without empiricism. As an oral teacher he had very few, if any, rivals, and none who have enjoyed the privilege of hearing him discourse at the bedside or sitting on a carefully poised stool will ever be able to think with anything but gratitude and admiration of "HUMPHRY of Cambridge." Anatomy was unquestionably his dearest study, and his work, "The Human Skeleton," is one of the very best books in surgical literature. That surgery could ever be divorced from accurate knowledge of anatomy was an idea utterly detestable to him, and the more closely he could interweave the two the happier he ever was. The work he did in this way was great, for HUMPHRY never came in contact with a student or a fellow-worker without leaving his own impress on him. But although he won fame as a great anatomist, a great surgeon, and a great teacher, it was for quite another object that HUMPHRY chiefly strove and for his success in another field that he will be chiefly remembered. His life-work was the establishment of a medical school in the University of Cambridge: for this he lived, for this, if need were, he would, we think, have died. It was the object nearest to his heart, and he had the great satisfaction—denied to many men—of living to accomplish it and to witness a success certainly equal to his hopes. We need not refer here to the difficulties of the task he attempted, some of them inherent, some of them arising from the indifference or the active hostility of his associates. Nor is this the place to discuss the influence of the "Cambridge School" upon medical education in this country and the profession generally. Undoubtedly the establishment of this school is a great fact; some of us think it is pregnant with a great future.

In speaking of these two great surgeons, who in different ways have played so manful a part, it is to be remembered that not only did their work lie a little outside the regular routine of surgical practice, but that the objects aimed at were not in any degree tainted by association with personal advancement or aggrandisement. The author of "The Science and Art of Surgery" and "HUMPHRY of Cambridge" have done a work greater and more lasting than

any that falls to the lot of the mere successful surgeon. Such men are an honour to their profession, to their country, and to humanity.

Annotations.

"Ne quid nimis."

THE QUARTERLY REPORT OF THE RED CROSS.

THESE *livraisons* increase in interest every year and from causes not very flattering to the Peace Society or the promoters of "Arbitration *versus* War." In spite of such laudable attempts to substitute international conciliation for the sword there has seldom been a time when warfare was more destructive than during the last generation—a period which not only includes the Franco-German and Turko-Russian campaigns but an almost indefinite number of those "little wars" of which no one had more dread than the Duke of Wellington. In the thirty-three years ending July, 1896, there have been every twelve months on an average sixteen nations engaged in hostilities! On the other hand, the organisation of the Red Cross has multiplied its ramifications till even such Powers as Japan have fallen into line and become affiliated to the parent society, showing an example which Spain, among other countries, would have done well to follow. Having allowed the Red Cross organisation to lapse shortly after the Carlist war, the Spanish Government showed signs of a desire to resuscitate it, but as far as we can gather her suppression of the Cuban revolt, with all its sanguinary, not to say ferocious, incidents, has not yet been mitigated by Red Cross intervention. To return to Japan, the most interesting feature in the present report is the anxiety she evinced to place her relief to the wounded on the best footing known to civilisation and to make the provisions of the Red Cross available, not only for her own troops, but for those of her antagonist. M. Nagao Ariga, the legal assessor at the Japanese headquarters, has given us a lucid narrative of the whole campaign in which China was so signally worsted, and incidentally has shown what pains his Government took to interpret the law of nations in the sense most conducive to minimising the horrors of battle. Not content with the measure of success with which its Red Cross organisation was worked, the Japanese Government delegated M. Ariga to confer at Geneva with the central authorities of the society so as still further to perfect the system which in the late war had given so satisfactory an account of itself. In marked contrast to the enlightened procedure of Japan, the Ottoman Red Cross remained inactive during all those Armenian and Cretan butcheries which have scandalised civilisation, and when remonstrated with for its inhumane supineness urged that the collisions between the Turks and their subject populations, being matters of domestic, not international, import, were outside the competence of the Geneva Convention. When the American Red Cross, having collected large funds for the relief of the Armenian sufferers, sought to apply them to their humanitarian purpose, it was met by the same objection as a bar to its intervention, and Miss Barton, the highly efficient and skilled president of the society's branch at Washington, visited Geneva on her way to Armenia so as to learn from the central authority how she could turn to the best account the relief funds placed at her disposal. She found she could apply them only by way of "private benevolence"—not as an agent of the Red Cross; and the account she gives of her work, in a letter from Constantinople, is one of the most intensely interesting features of the present report. Another important section of the same *livraison* relates to the coming *réunion* of the Powers which signed the Geneva Convention, a *réunion* which will take place at Vienna next year. The official name for this assembly is "Conférence Générale des Sociétés de la Croix Rouge," and its predecessors have been five in number—meeting first at Paris, then at Berlin, next at Geneva in 1884, then at Carlsruhe, and finally at Rome, at which last the proceedings were specially reported and at great length in THE LANCET. One feature of the Vienna meeting was to have been the extension of the Red Cross organisation to the calamities of civil life—earthquakes, floods, mining-explosions, conflagrations, and such-like. It is understood that this proposal has encountered opposition at headquarters; but it would be interesting to know, in the probable event of its being revived, on what grounds so manifestly humanitarian a development of an essentially humanitarian society is to be postponed to the Greek Kalends.

CENSURE OF A MEDICAL MAN.

AN inquest was recently held at Derby by Mr. Close, borough coroner, touching the death of Rebecca Riley, a married woman aged thirty-four years. Deceased had a miscarriage, but the placenta was retained. Dr. Alan Bell was called in, and said that the assistance of another medical man was required. At the request of the woman and her friends it was decided to ask Mr. Holmes, Licentiate in Midwifery of the Rotunda Hospital, Dublin, but whose name is not on the Register as a duly qualified medical practitioner. Dr. Bell deposed that he only became aware of these facts when he met Mr. Holmes and went with him to the house of deceased. It is quite clear, however, that after being possessed of such knowledge he consented to give an anæsthetic whilst Mr. Holmes removed the placenta. By some mishap certain injuries were inflicted which necessitated the removal of the woman to the Derby Infirmary, an operation being imperative. Unfortunately the patient succumbed. The main facts were not in dispute, but the jury had to decide whether Mr. Holmes used reasonable care, because in that case he would not be legally responsible for the result, since it has been laid down by a judge that the law allows an unqualified person to perform an operation provided he does not act negligently. It was given in evidence that a similar accident had happened to qualified, skilful practitioners, and the jury by their verdict of "Accidental death" acknowledged that Mr. Holmes had not been guilty of carelessness. They, however, added a rider to the effect that Dr. Bell was to blame for allowing Mr. Holmes to perform the operation knowing that he was not a qualified medical man and that Mr. Holmes deserved censure for performing the operation. The report of the inquest does not say whether the coroner acquiesced in the censure passed by the jury, but from his remark, "It is their verdict, not mine," we gather that he did not. As a general principle it may be laid down that a medical man should not act in concert on equal terms with a person who is not legally qualified. This is in accordance with medical ethics and is obviously for the public good. We say on equal terms because the General Medical Council does not consider it derogatory for a medical practitioner to employ a non-qualified assistant, and here we would refer to a quotation from our pages referred to at the inquest by the representative of the Derby Medical Association. This quotation was correct *as far as it went*, but the very essence of our remarks lay in the context, which was not given—

viz., that such unqualified assistant should live in close vicinity to his principal and should act only under his direct supervision. In the case under consideration Mr. Holmes did not officiate as Dr. Bell's assistant, for it was he who undertook the important duty of removing a retained placenta, Dr. Bell giving the anæsthetic. We are not disposed to blame the jury for their rider, considering that such pronouncement must tend to emphasise the desirability of none but legally qualified men practising important operations. At the same time we freely admit there that were extenuating circumstances both as regards Dr. Bell's and Mr. Holmes's procedure. Mr. Holmes possesses a licence to attend midwifery, which he obtained many years ago. He has for a long time been engaged in the capacity conferred by such licence, and has, it appears, been employed by the local medical association. It must not, however, be forgotten that the licence is now practically only a certificate since it is not registrable. That is clearly defined by the Act, which only acknowledges diplomas granted after examination in medicine, surgery, and midwifery. Dr. Bell was certainly placed in a difficult position, for, as he said, there was no maternity institution to send the patient to, and his refusal to coöperate with Mr. Holmes would have meant such delay as might have been inimical to the chances of the woman's recovery. The inquisition at Derby will furnish a salutary lesson and impress upon medical men that the profession does not countenance common employment of a qualified and non-qualified man save in the respective capacities of principal and assistant—the former incurring undivided responsibility.

"SECRET COMMISSIONS IN TRADE."

SIR EDWARD FRY used to be a judge. He has had a legal training and is accustomed to weigh evidence, and not, we hope, to give an opinion without good reasons for it. Recently he has been writing to the *Times* about secret commissions in trade, and discoursing, quite rightly, upon the immorality of the same. He mentions offers of commissions by undertakers to medical men upon every funeral they "supply." Well, probably most medical men have had offers at some time or another, generally upon their starting practice, of commissions from enterprising undertakers, which offers have been in the usual way consigned to the wastepaper-basket. Sir Edward Fry writes as follows:—

> "Of all commissions that have come to my notice the most gruesome is that to which your correspondent 'F.R.C.P.' alludes—a commission to be given by an undertaker to the medical attendant of the deceased. Your correspondent hopes that this is a thing of the past; but another informant of the highest credit tells me of a quite recent case in which a poor governess died in a school, and as soon as she was dead the medical man pulled from his pocket a sheaf of the cards of an undertaker and, giving one of them to the person concerned, suggested the employment of the undertaker. The undertaker was employed, but the medical man has not since been called in, for the real nature of the transaction gradually became apparent to the head of the school.
>
> "What a psychological study (to use a current phrase) is presented by the doctor standing by the bedside of a patient hovering between life and death with a pack of the undertaker's cards in his pocket. Imagine such a doctor, perhaps pressed for his last quarter's rent or his butcher's bill, computing the possible fees to be earned if the patient live, and setting these against the commission which will be paid if the patient be successfully buried; contrasting the speedy payment of the prosperous undertaker with the probable delay and trouble of getting the fees from the slowly convalescing patient, and then the conflict between these degrading thoughts and the sense of duty not yet extinct in the doctor's breast. This it may be hoped is a rare case; but its moral is applicable to all secret commissions. It requires but little imagination to see that conflicts like this, though differing, of course, in each case, must be raised in thousands of instances every year by this system of secret commissions. It is perpetually presenting temptations to the young, the striving, and the inexperienced in professions, in trade, and in domestic service; and the struggle or the remorse must often be bitter. The system is as cruel as it is degrading."

The story about the poor governess may or may not be true. Medical men are not immaculate any more than lawyers; but what does Sir Edward Fry mean by "the real nature of the transaction"? If he does not imply that the medical man may have murdered the governess for the sake of the undertaker's commission the remark is meaningless. To go on to Sir Edward Fry's "psychological study." What right has he to draw hypothetical pictures "of the doctor standing by the bedside of a patient hovering between life and death with a pack of undertaker's cards in his pocket"; of the wicked medical man torn by doubts as to whether he will let the patient die and get the undertaker's commission or struggle to save him and perhaps get a fee? Sir Edward Fry asks the readers of the *Times* to imagine such a thing. It does not want a very vivid imagination; but suppose anyone were to write and ask people to imagine a judge undergoing a mental conflict whether he should or should not nonsuit a petitioner on account of pecuniary considerations. It would be just as easy to imagine this, but the legal profession would, we think, undoubtedly take exception to such imagination. Sir Edward Fry should have known better than to write such silly and offensive stuff and he owes the medical profession an apology.

THE PRESS AND THE PROPAGATION OF CRIME.

AT the Congress of Criminal Anthropology recently held at Geneva Dr. Aubry made some remarks on this important question. In his opinion the press is unfortunately of the greatest use to those who are studying the methods of criminal proceedings. The detailed accounts of trials teach malefactors all the weak points of the law and all the best methods of avoiding justice, and by a little patient study an ordinary criminal of little or no originality is able to educate himself by means of the experiences of his less fortunate brethren. As Dr. Aubry says: "The newspaper admirably points out to clever people how they may succeed in walking without risk on the margin of the Criminal Code and how they may avoid or circumvent some dangerous clause. There is also another side of the question, and that is the effects which criminal details produce on those whose nervous systems are unstable; they may naturally have no tendency to crime at all, but continually reading about it may easily excite them and prove a dangerous incentive to many bad deeds which would otherwise have been unthought of. It is most desirable that the details of criminal reports should be judiciously cut down before publication?"

THE MEDICAL STAFFS OF COTTAGE HOSPITALS.

A VERY lively and interesting discussion is reported in the *Willesden Chronicle* of Sept. 25th on the constitution of the medical staffs of cottage hospitals. There is a so-called cottage hospital at Willesden, and the resignation of a member of the staff gave occasion to those members of the profession who wished to see the staff thrown open to all practitioners to urge their views on the council. The hospital has nine beds and a staff of nine—one consulting physician and eight others. Each member of the staff in rotation takes charge of the nine beds. The patients consist largely of the very poor, and admission is by letter and small payments of from 3*s.* to 10*s.* a week. The memorial for the enlargement of the staff was signed by about thirty of, say, sixty or seventy practitioners in the neighbourhood. It urged that in the system of such cottage hospitals generally all neighbouring members of the profession were included in the staff, and with much candour said that medical men having patients who must go to a hospital would prefer to confide such patient to the care of one who "could not from his position, willingly or otherwise, become a competitor with him in private practice." With this suggested risk of the appropriation of patients and the consequent fear of the ordinary attendant the hospital was practically available only for the patients of members of the staff. This is not pleasant reading for the profession or

calculated to set it off well in the eyes of the public. There is, of course, some truth in the suggestion, but not enough to justify such uncontrolled and unqualified candour. The argument was met in the reply of the medical staff with a dignified challenge to produce "a single case" in support of a charge which could only be justified by cases. The staff argued that to throw open nine beds to sixty or seventy practitioners to attend only to their own cases would leave the responsible care and the internal management unprovided for and necessitate the appointment of a paid resident. They considered that a hospital in a population of 70,000 cannot be compared with a rural hospital with three or four practitioners around. At the same time the majority of the staff wisely expressed approval of an arrangement carried out in the Hampstead Hospital by which patients are admitted under the care of their own medical men. This ought to be adopted. It seems to us that the best of the argument rests here with the staff, and that to diffuse the management of nine beds and accidents among sixty or seventy practitioners would be to divest the appointment of all interest and to invite that state of things where nobody does that for which everybody is responsible.

THE NOTIFICATION OF MEASLES.

WE see from a newspaper report that the Tenterden district council resolved at a recent meeting to apply to the Local Government Board to allow measles to be added to the list of notifiable diseases under the Infectious Diseases (Notification) Act. The consent of the Local Government Board is necessary, for the Act does not mention measles by name, yet measles, being a disease which kills some 10,000 to 14,000 people every year in England and Wales, is undoubtedly a dangerous infectious disease according to the Public Health Act of 1875, and by the Notification Act the local authority is empowered to extend the definition of the dangerous infectious diseases mentioned in that Act either temporarily or permanently. Measles is often added to the list of notifiable diseases, the Local Government Board assenting, provided that the local authorities are willing to maintain the certificate for from three to five years. Of course, the difficulty of providing sufficient accommodation for the isolation of measles is almost insuperable, and as notification without isolation is not of much if any use, this probably is the reason why measles was not scheduled in the Act.

CEREBELLAR TUMOUR.

IN a ecent number of the *American Journal of the Medical Sciences* Dr. Lloyd of Philadelphia records a case of tumour of the cerebellum which is particularly interesting from the fact that operation was decided upon but for accidental reasons was not carried out, and, as was afterwards found, if it had been carried out as was proposed it would have been unavailing. The patient was a man aged thirty-eight years with a negative family history. He had had syphilis but denied alcoholism. Seven years before he was seen he had been struck on the occiput with a piece of grindstone and after that had been troubled with violent headaches. Five weeks before his admission to hospital his headaches became more severe, the pain was shooting in character, and he noticed that his vision was failing. On admission his gait was found to be characteristic of cerebellar disease. There was forced movement of the head and trunk to the right side when he attempted to sit up, and this became more marked when he tried to walk. He was almost completely blind and there was intense papillitis with five dioptres of swelling in the left eye and four in the right. No paralysis of cranial nerves could be discovered except that the right auditory nerve seemed to have its function considerably impaired. There was no difficulty in swallowing and there seemed to be some mental dulness, with slow speech and vague replies to questions. In discussing the question of an operation it was thought that the exemption of nerve affection pointed to the growth being distant from the base. There was nothing to indicate one side more than another except the forced movement to the right (which might mean pressure on a cerebellar peduncle on either side) and the remains of the injury to the occipital bone on the right side. So it was determined to operate on the right occiput. However, as has been said, accident prevented the operation from being carried out and the patient gradually sank and died about two months after admission. At the necropsy there was found a tumour on the under surface of the cerebellum on the right side, lying between the pons and medulla on the one hand, and the right lobe of the cerebellum on the other. The growth sprang from the middle cerebellar peduncle and the posterior part of it was cystic. The under surface of the right lobe of the cerebellum was excavated and had assumed a cystic character. Undoubtedly the absence of impairment of the functions of the cranial nerves in this case is very remarkable, and it is also interesting that the forced movements were towards the side of the lesion and not, as in most cases, away from it. Dr. Lloyd is of opinion that surgical interference in cases of cerebellar tumour must be largely experimental and is always most hazardous. He thinks that operation in this particular case would have been inevitably fatal. The difficulty of localisation must always be great, and the technical difficulties, he thinks, are such as will frequently baffle the best and most self-possessed surgeon.

HEREDITY, CRIMINAL AND OTHERWISE.

PROFESSOR LOMBROSO'S pessimistic theories as to the intimate and necessary connexion between degeneracy and criminality have recently encountered a certain amount of hostile criticism in Scotland. Professor W. T. Gairdner of Glasgow University points out, in a letter to the *Scotsman* of Sept. 4th, that the "wild hypotheses and inferences of the Italian professor," if carried out to their logical conclusion, would absolve criminals from individual responsibility and paralyse all wholesome discipline. In support of his opinion that these teachings are unsound he quotes an instance, remarkable of its kind and capable of ample verification, which will probably supply Professor Lombroso and his adherents with some knotty problems. As the result of special inquiries, made many years ago, Professor Gairdner was informed that the Tasmanians, who are descendants of a British criminal colony, "were remarkably free from all such apparent 'reversions' of inherited instincts; and that, whether judged by their actual criminal record or by the number and quality of the insane in their asylums, the race now inhabiting this oldest and probably worst of our penal settlements was as orderly, as flourishing, and as well-to-do as in any other colony, and altogether bore most favourable comparison with any other portion of the British stock either at home or abroad." In conclusion, he throws out the suggestion "that the case of Tasmania may contain in a nutshell the whole and sufficient reply of Nature and civilisation to the extreme 'stigmata' theory, from which even some of the Lombrosists appear now to recoil." Students of criminal anthropology and social science will, no doubt, welcome this addition to the data at their disposal for the judging of the question. Professor Gairdner contents himself with calling attention to this conspicuous example of self-regeneration and speedy development of order out of chaos; he does not attempt to trace the phases of the transition, neither does he enter on the slippery paths of speculative

conjecture. Professor Lombroso's arguments are, however, capable of development in other directions than those selected by their author, and the case of Tasmania may even supply an opportunity of meeting the pessimists with weapons from their own armoury, for those who admit the existence of an irresistible hereditary bias to crime can hardly deny the possibility of a bias, if not to righteousness, at least to good works. It should not be forgotten that in the transportation days the island was not occupied exclusively by a criminal class; many of the inhabitants were government officials charged with the maintenance of order, and when these opposing elements became ultimately intermingled the higher ethical standard of the young generation might be taken as evidence that by the union, for instance, of a murderer with the widow or daughter of a gaoler the predisposition to wickedness inherited from the father was counteracted by the law-abiding bias derived from the mother.

THE ENCOURAGEMENT OF BONE-SETTERS.

IT is a pity that the press of this country should directly lend itself to encourage the careers of such men as bone-setters, who pass themselves off as being able to effect wonderful cures when all the rest of the world have failed to do so. The *Lancashire Express* devotes an article to a bone-setter and joint specialist, in which various wild statements are made with regard to his skill, as he is said to succeed daily "after the large infirmaries and the most successful surgeons have failed," and all this success is attained without blistering, bandages, iodine, and embrocation such as were used by the old-fashioned bone-setter. We venture to think that it is most unfair to the public to put forth an article such as this unless it is stated that it is an advertisement, for it is immediately looked upon as authoritative by a large portion of the credulous public, who have only to see a thing in print to believe it, and are ever ready to reply to any objections that—"It said so in the paper at any rate." By this means many people are induced to try the various "cures" when no fair advertisement would have drawn them.

SCHOOL CLOSURE AT SOUTH NORMANTON.

ACCORDING to the local press it is stated that the schools of the South Normanton School Board had been ordered to be closed by the medical officer of health to the Mansfield rural sanitary authority and that his order had been "set at defiance." The ground of failure to act is stated, amongst other things, to have been that the school board had no knowledge of the extent, increase, or otherwise of the disease which had led to the order, and that the medical officer of health had not visited the village. We draw attention to the occurrence because, if it is correctly reported, the case is one of many others in which there is misconception as to the duty of the medical officer of health in this matter. In the first place this official has no power to close a school. His duty is that of a health adviser, and when he advises his district council that a school should be closed or that scholars should be excluded it is the authority, and not he, who issues the necessary order; and the school board have, under the Education Code, no option but to comply with the order, although after compliance they can appeal to the Education Department to rescind the order. In the second place a medical officer of health has no duties towards a school board; his duties are to the district council and through them to the general body of the inhabitants. It may be policy to visit a district and to confer with the school officials before advising the closure of a school or it may not. We are by no means prepared to say that such action may not at times be properly taken on the notification returns and without a personal visit; but one thing is certain, and that is that if the district council have, on the advice of their health officer, issued the order as to school closure it is no business of the school board to cavil at the grounds on which the order is issued and to make this the basis of a discussion whether they shall obey or not. All that they have to say as to this must be embodied in the appeal to the Education Department, who in such matters seek the advice of the Medical Department of the Local Government Board.

HOSPITAL ABUSE.

THE provinces seem to be no better off than the metropolis as regards the abuse of hospitals, judging by a letter from a layman which appeared in the *Sheffield Daily Telegraph* of Sept. 26th. He points out how any day in the out-patient departments of the various Sheffield hospitals people attend as "sick poor" who have paid 2*s.* for railway fare and 3*s.* for cabs; that many large firms who ought to pay the local medical man for attending at their works subscribe instead to the charity and take the "letters" to which they are thereby entitled; that the usual fee of a general practitioner in the neighbourhood is from 1*s.* 6*d.* to 2*s.* 6*d.*; and that even this pittance is not received at once, but painfully collected by sixpenny instalments. If this state of things be so—and "Observer" writes very temperately and with the air of one sure of his facts—it is a crying shame. We in London, however, cannot afford to cast stones at our provincial brethren. We wonder in how many hospitals the same abuse exists. Of our own personal experience we know one hospital to which a patient used to come once a month from the other side of Peterborough to be inspected and obtain medicine. The return fare (third class) is 12*s.* 8*d.*, which would probably have been a godsend to some village practitioner. How abuses of this and kindred sorts are to be remedied is doubtless a difficult question, but that they should and must be is a necessity. In another column will be found an article from a correspondent suggesting details of a tentative scheme to this end, and in many directions can be seen signs that the profession is making up its mind that it will not be so persistently and cruelly imposed upon.

THE DECUSSATION OF THE OPTIC NERVES.

IN the last number of the *Neurologisches Centralblatt* there is an important preliminary communication on this subject from Dr. L. Jacobsohn of Berlin. He refers to the contention of Kölliker at the recent Anatomical Congress at Berlin that in mammals and also in man there is a complete crossing of the optic nerves at the chiasma, a view which Michel formerly advocated against that of Gudden, who held that in mammals a semi-decussation took place at the chiasma. Dr. Jacobsohn used in his researches Marchi's method, by which a degenerated fibre can be traced clearly from the point of section onwards, and his method of experiment was to extirpate one eye and kill the animal a few weeks later, when the degeneration could be easily traced. As the fibres of the optic nerve run without interruption from the retina to the corpus geniculatum it was obviously easy to trace degenerated fibres both in the chiasma and in the optic tract, and so to determine whether the fibres from the extirpated eye all ran on one side or whether some crossed. Rabbits, guinea-pigs, cats, and monkeys were used for experiment. In the rabbits and guinea-pigs no degenerated fibres could be traced through the chiasma to the tract of the same side. All apparently crossed to the tract of the opposite side. But in cats and monkeys, on the other hand, there was a considerable number of fibres to be traced into the optic tract on the same side as the extirpated eye, clearly showing that in these animals the crossing at the chiasma was only an imperfect one. There is, of course, a presumption that

a similar arrangement holds in man, and the writer in a note added after his paper was written calls attention to a case shown by Schmidt-Rimpler at the recent Ophthalmological Congress at Heidelberg in which such an arrangement was demonstrable. A complete account of the results of Dr. Jacobsohn's research will be eagerly looked for, and in the meantime he is to be congratulated on the successful and highly interesting result of his experiments in reference to the decussation.

ISOLATION HOSPITALS IN CHESHIRE.

FOR some time past the importance of making provision for cases of infectious disease has become increasingly evident to the local authorities, and in July last deputations from various urban and rural councils met the members of the Health Committee of the Cheshire County Council to confer on the subject. Mr. Hewitt, chairman of the Health Committee, presided, supported by Colonel Dixon, chairman of the county council, and delegates attended from the Bucklow Rural District Council and Alderley Edge, Ashton-on-Mersey, Sale, Lymm, Knutsford, and Wilmslow urban district councils. The chairman told those present that if the urban and district councils were not prepared to take the initiative in providing hospital accommodation the county council would force the matter and do the necessary work. At the same time they wished to give every assistance, pecuniary and otherwise. On Sept. 21st representatives from these districts met at the Knutsford workhouse, and a resolution was passed recommending the various councils to request the Local Government Board to issue a provisional order forming the districts mentioned "into a united district under Section 279 of the Public Health Act of 1875 for the purpose of the provision, maintenance, and management for the use of the inhabitants of the districts of a hospital or hospitals for the reception of cases of infectious disease." The general feeling seems to be in favour of two hospitals rather than one, for the area to be covered is very large. It is high time that this provision should be made, and it is to be hoped that the work will be carried out with promptness and energy.

PARAPLEGIA IN PERNICIOUS ANÆMIA.

AT the recent meeting of the American Neurological Association Dr. C. Eugene Riggs reported the case of a woman aged forty-five years who had become paraplegic after a severe nervous shock three years previously to coming under observation. There was impaired sensibility in the lower limbs and on the trunk as high as the ensiform cartilage, and a spastic condition of the legs with exaggeration of the knee-jerks, with rectus clonus. There was neither ataxy nor shooting pain. There was very marked reduction both in the number of corpuscles and the quantity of hæmoglobin, and the patient presented an appearance of extreme pallor without marked emaciation. There was apparently a gradual failure of strength, and finally death took place. At the necropsy the thorax, abdomen, and pericardium were found to contain a large quantity of serum, the heart was pale and flabby, and the liver and spleen were enlarged. Within the spinal canal in the mid-dorsal region there was found a considerable extravasation of blood, with apparently some serous effusion as well. The cord on being hardened was found to present very extensive degeneration, affecting the anterior pyramidal tract, the direct cerebellar tract, the crossed pyramidal tract, Lissauer's tract, and the posterior columns. This degeneration was most marked at the sixth dorsal and third cervical segments, but extended from the first cervical to the fifth lumbar. There seemed to be no direct relation of the degenerated areas to the extravasation of blood. The two points in which this case seems to differ from other cases of degeneration of the spinal cord associated with anæmia are the facts that there apparently was hæmorrhage into the spinal canal and that Lissauer's tract was affected. The latter is unusual in this variety of sclerosis (if it is a separate variety), and, although hæmorrhages in the retinæ and in other parts occur in the course of pernicious anæmia, hæmorrhage into the spinal canal is very rare if not actually unique.

PUBLIC HOUSES, INQUESTS, AND MORTUARIES.

EVERYONE knows the saying "De mortuis nil nisi bonum," and if this be true of words it ought to be still more so of deeds. In fact as regards the dead we might adapt another Lat'n proverb, and say, "Maxima debetur mortuis reverentia." That this is not always the case is exemplified daily. At an inquest held recently at Farncombe, the medical man complained bitterly of the difficulty he had experienced in making the post-mortem examination, which had to take place in a private house owing to there being no mortuary. Almost coincidently with this an inquest was held in a public-house at Wandsworth, where the jury—all honour to them—passed the following resolution, with which the coroner agreed: "We, as a coroner's jury here assembled, beg to put forward our protest in view of the fact that our parish, to which we are all ratepayers, is without a proper coroner's court. We consider that every parish should be provided with a court and mortuary (combined), which would prevent the necessity of holding such sacred inquiries, as inquests should be, in a public-house. The surroundings are directly opposed to the proper holding of such inquiries, and we call upon the authorities to erect a proper court in this parish." We think this is a subject which might well occupy the attention of County Councils. Reverence for the dead—or, indeed, any other sort of reverence—has become nowadays far too rare, and apart from the ethical and theological side there is the question of health to be considered—both that of the medical man who makes the necropsy and of the rest of the living.

AN outbreak of fever, attended by some of the features of what is alleged to be bubonic plague, has taken place at Bombay and has been attended by many deaths. The occurrence has naturally excited a good deal of alarm among the native population, many of whom have left the city. The troops of the British and native armies have been temporarily prohibited from entering the affected locality, and the Government has appointed a committee to inquire into and report upon the subject. Mr. Dutt has arrived from Calcutta with the special object of aiding the committee in their investigation. The outbreak is probably of the same nature as that which occurred lately in China and Hong-Kong.

WE have received a prospectus of the London Post-Graduate Course for the winter term of 1896. Lectures and demonstrations will be delivered at the following seven institutions:—The Royal London Ophthalmic Hospital, Moorfields; the Hospital for Diseases of the Skin, Blackfriars; the Bethlem Royal Hospital for Lunatics; the London Throat Hospital, Great Portland street; the Bacteriological Laboratory, King's College; the Central London Sick Asylum, Cleveland-street; and the British Institute of Preventive Medicine, Great Russell-street. The days and hours fixed for the different lectures and demonstrations will be announced weekly in our diary.

THE first lecture of the winter session at the Brompton Hospital for Consumption and Diseases of the Chest will be delivered by Dr. F. T. Roberts at 4 P.M. on Wednesday, Oct. 14th, on the Value of the Simpler Methods of Examination of the Chest.

IN our notice of the lectures to be delivered at the Royal College of Physicians of London which appeared in THE LANCET of Sept. 26th, 1896, a mistake occurred. Dr. Sidney Martin was announced as Croonian Lecturer for 1897, whereas Dr. Hale White is the lecturer for 1897 and Dr. Martin for 1898. The Harveian Oration will be delivered by Dr. J. Frank Payne at the College on Monday, Oct. 19th, at 4 P.M.

THE first session of systematic teaching for fifth year's students and practitioners at the National Hospital for the Paralysed and Epileptic, Queen-square, will be opened by an introductory lecture by Dr. Gowers, F.R.S., on Tuesday, Oct. 6th, at 3.30 P.M., to which medical men are invited. The wards and museum will be open to inspection after the lecture.

THE Lettsomian Lectures of the Medical Society of London will be delivered on Feb. 1st and 15th and March 1st, 1897, by Dr. de Havilland Hall. The subject is announced as Diseases of the Nose and Throat in relation to General Medicine. The annual oration of the society will be delivered by Mr. Edmund Owen.

MEDICAL practitioners (so far as there may be room) will be admitted to Dr. Michael Foster's Huxley Lecture on Recent Advances in Science and their bearing on Medicine and Surgery at Charing-cross Hospital Medical School on Monday, Oct. 5th, at 4 P.M., on presentation of their visiting cards.

WE are asked to direct the attention of medical students commencing their first winter session to the announcement in THE LANCET of Sept. 19th, page 857, regarding the examination and prizes for phonographers.

DR. S. WILKS, F.R.S., President of the Royal College of Physicians, has accepted the office of Consulting Physician to the Great Northern Central Hospital, Holloway-road, N.

THE REPORT OF THE ROYAL COMMISSION ON VACCINATION.

(*Continued from p. 900.*)

STATE vaccination at the child's own home instead of at a public station is the most striking innovation proposed by the Commission. It would involve a complete upturn of all the existing arrangements of the vaccination service. It is a question as to which one presumes that the Commission has ascertained the views of the Local Government Board, for it is very certain that regarding so great a change many considerations would present themselves to the department which at present has charge of vaccine administration. Experience and skill are of importance in most affairs of human life and are usually considered so with regard to vaccination. Long practice of the operation is probably of consequence chiefly with regard to success in the method of insertion. A skilled vaccinator can produce four good vesicles in all but the merest fraction of his cases, while a practitioner of less dexterity may not infrequently get only two or three successful insertions instead of four. Now the proposal for home vaccination, as we understand it, involves the abolition of the office of public vaccinator as at present constituted, and the substitution of a system by which every accoucheur who cared to vaccinate the children belonging to his own practice would become a State vaccinator. This would almost certainly result in some diminution in the number of successful insertions, owing to the limited amount of experience which each vaccinator could obtain. Then, again, the system would involve the use of stored calf lymph as distinguished from fresh calf lymph, and it is quite possible that this also would diminish the "insertion success." But if calf lymph stored in pure glycerine has the advantages claimed for it in the way of freedom from ulceration and erysipelas, this might more than atone for diminution in "insertion success." After all, it is really doubtful how the system of calf-to-arm vaccination in rural districts would work out in practice. A van travelling from hamlet to hamlet with a calf and an operator might lend variety to the monotony of English village life, but there might be some want of uniformity in the reception accorded to it in different places, especially if any of them were under the influence of the anti-vaccination cult. In spite of the lessening of "insertion success" which would probably result from a system of home vaccination, the scheme grows in favour when its advantages are carefully considered. The vaccinator being, as a rule, their own medical man, would be known to the parents, and they would have confidence in his care and skill. The child would not require to be carried through busy streets or country lanes in any kind of weather to and from a public station, and would not require to wait in a crowded room his or her turn for operation or inspection among fifty or a hundred others, not all of them perhaps, either parents or children, as clean as they might be. With no need to take the child away from home there would be less risk of the vesicle being broken, and any remote possibility of infection of erysipelas or other malady through attending at a public station would disappear. In particular, the proposal for home vaccination has to be looked at along with the other proposal for the abolition of prosecutions and fines. If such coercive means are to be abolished, everything must be done to make vaccination convenient and acceptable, and to remove from it all imaginable and imaginary drawbacks. Now it seems to us that vaccination done at the cost of the State, on a child six months old or more, at home, by the family medical man, and by means of calf lymph, is likely to meet with as little opposition as can be looked for in this country. In fact, all that will be required from the parent will be an attitude of passive acquiescence. There will be no need to exercise even the small amount of volition involved in deciding to take the child to the vaccinator. The vaccinator will go to the child, and the only bar to the child's forthwith undergoing the protective operation will be the active refusal of the parent to yield to the request and to the influence of the family medical attendant. There is certainly a great deal to be said for the scheme of the Commissioners for home vaccination, but we are not prepared to say that all stational attendances need be given up in order to give effect to it.

The other recommendations need not long detain us. They are mostly on well-known lines and are intended to make vaccination in all respects a safe and trustworthy operation. The suggestion that insanitary environment should be a bar to vaccination is new.

It is vaccination as thus described that is to be offered to parents as an alternative to a declaration of conscientious objection. There is reason to hope that many who are honest in their dislike of humanised lymph would be persuaded to yield by the offer of calf lymph, but it may be taken as certain that the Commissioners do not expect that the more active members of anti-vaccination leagues will cease their opposition. The class that the Commissioners have had most in mind is that of the merely indifferent, who have no particular feeling against vaccination, but who yet, if left to themselves, would, from sheer carelessness, let the operation remain unperformed. The Commissioners would have the legislature place two courses before such persons: on the one hand, that they should allow the visiting medical man to vaccinate and re-visit the child at the child's own home at the cost of the State, and with all the precautions above specified; and, on the other hand, that they should go to a magistrate and make a declaration of conscientious objection to vaccination. No detail is suggested as to how the latter proceeding should be carried out, but we may take it that it would have to be done in the presence of witnesses, and that the declaration would afterwards have to be taken to the registrar to be recorded in his books. One object is to make the declaration at least as troublesome as the vaccination to the careless parent, and seeing how every inconvenience is to be smoothed away from the vaccination it is not possible to deny that the suggested scheme would be successful. That the Commission itself, however, is not too confident of the success of its own proposals is shown by its suggestion that the plan should be

tried for five years and that the results should then be subjected to review by Parliament.

Two of the Commissioners whose views are bound to have great weight with the medical profession — Sir W. Guyer Hunter and Mr. Jonathan Hutchinson — do not see eye to eye with their colleagues as to the degree to which the law should be relaxed. They propose instead "that in all cases in which a parent or guardian refuses to allow vaccination, the person so refusing should be summoned before a magistrate, as at present, and that the only change made should be to permit the magistrate to accept a sworn deposition of conscientious objection and to abstain from the infliction of a fine." In this connexion it must be remembered that the Commission has already and unanimously reported in favour of the abolition of repeated penalties, so that the proposal refers only to a first penalty. Probably a compromise between the suggestion of the Commission and that of the two dissentients might retain the best part of both proposals. The objection to the scheme of Sir W. Guyer Hunter and Mr. Hutchinson is that it leaves too much to the choice of the magistrate. That functionary is to be *permitted* to accept a declaration. It would thus appear that if he pleased he could inflict a fine instead. There might be infinite diversity of practice in different courts. On the other hand, the citation to go before a magistrate at a fixed day and hour in a court of law, with all the forms and formalities that belong to legal procedure in this country, might be more deterrent to an indifferent parent than a mere call on a justice of peace in order to sign a declaration. Probably, therefore, the proposal of the two dissentients might be modified so that the magistrate could impose a fine only in the event of the parent's refusal to make the necessary declaration, and with this modification there would be practical agreement between these dissentients and the majority of their fellow Commissioners, so far as infantile vaccination is concerned.

For our own part we are bound to say that we have little fault to find with the scheme proposed by the Commissioners in this respect. It is their obvious desire to promote the practice of infantile vaccination, and there is much to be said in favour of their view that the best way to accomplish this is to modify the law so that the manufacture of anti-vaccination martyrs shall cease, and so that those who are merely indifferent shall not get the opportunity of neglecting vaccination as a result of their indifference. In most communities where Boards of Guardians have ceased to enforce the existing law, and where indifference is allowed to have its full effect, there can be little doubt that a house-to-house offer of vaccination under the conditions set forth in the Report would result in the protection of thousands of children who are at present open to attack by small-pox.

In another article we shall deal with the Commission's views and proposals as to re-vaccination.

THE APPLICATION OF COÖPERATION AND MODIFIED TRADE-UNIONISM TO MEDICINE.

(BY A PRACTICAL MAN.)

WE have received the following outline of a scheme which attempts to grapple with the financial depression under which the interests of the medical profession at large are at present abiding. To many the bare idea of trying to cope with a condition of things regulated, they would say, by the laws of supply and demand is ridiculous. To others, willing to admit possibilities of reform, this scheme will read as too drastic and too Utopian. Some will see in it practical possibilities. At this present juncture the proposals made in it are too crude for detailed comment, but any attempt at reform by deeds must be greeted with respect by all really concerned in the welfare of the profession as very distinct from personal aggrandisement, and we desire to invite comment upon the proposals of our anonymous correspondent, whose position, we may add, entitles him to understand in a very practical way many sides of the subject on which he writes

The spirit of reform is everywhere abroad among the members of the medical profession. It would be well if the opportunity of its existence could be taken to put the financial arrangements between the public and the profession upon a satisfactory basis. The time is propitious, since it cannot be doubted that much of the discontent which is so evident is due to pecuniary difficulties. Underselling, advertisement, medical aid societies, and sixpenny dispensaries would cease to be attractive, and the abuse of medical charity fail to cause so much heartburning if the struggle for a living among general practitioners were less acute.

Medical assistance is an absolute necessity for the majority of mankind and the power of a united medical profession to dictate its own terms is in consequence enormous. One is appalled at the suffering that might be entailed upon the poorer classes by such a combination, actuated solely by greed, and efficiently protected against unqualified practitioners. The previous history of the medical profession, its willing coöperation with the charitable public in the administration of hospitals, and the readiness of individual medical men to regulate their remuneration according to the poverty of their patients, may give an assurance that no bald attempt to wrest more money from the public in return for medical services will receive the general approbation of the profession.

The scheme of financial reform outlined below represents a serious attempt to grapple with the difficulties of the poorer members of the public in obtaining proper medical attendance and of the poorer members of the profession in obtaining proper remuneration for their services, and at the same time to deal in an effective manner with the abuse of medical charity.

From the very earliest times it has been recognised that the poorer classes of the community are unable to make an adequate return to their medical attendants for professional services. Ever since the practice of medicine has been undertaken by a distinct profession this difficulty has been met by charity, at first dispensed by voluntary effort, more recently by the State. The dispensation of medical charity by both these methods in combination having proved inadequate to the need, the principle of coöperative insurance for medical relief has in late years been introduced. As, however, practically no control has been exercised upon the dispensation of medical charity, and no serious organisation or compulsion used to extend the coöperative principle, the very large class of improvident poor has naturally preferred charity to coöperation. The proposal now submitted is to make use of the great power possessed by a voluntary union of medical men in order to set a reasonable limit to the dispensation of charity and to compel those who are able to do so to make use of the coöperative principle for the purpose of providing themselves with medical relief.

For the profession to take up such a position as this is no unkindness to the great body of the public who would be compelled to adopt the coöperative principle, so long as the periodical contribution required from each person is one well within his means. This action is really much more considerate than to leave such persons alone until, overtaken by serious illness, they find themselves obliged either to dissipate all their scanty earnings in paying the medical attendant or to appeal to the charitable public to provide them with medical assistance. If it is a kindness to the public concerned it is also undoubtedly an advantage to the medical practitioner. Not only would the actual sum of money to be divided among those medical men who attend this class of patient be much larger, but the hardening of the heart required before one can take money from a poor man incapacitated by illness would be rendered unnecessary. Thus would the profession be better paid for its services with less hardship to the patient, and thus would its members be enabled to retain those higher qualities of mercy and compassion which are as valuable to the public as they are to the profession. If it be granted that on general principles the coöperative method of paying for medical services would be an advantage both to the medical man and the patient, it has still to be shown that the method can be applied practically on such a large scale as would be necessitated by the united action of the profession on the lines now suggested. Not only is it believed that this can be done, but that it can be further shown that the practical difficulties now met with in the working of isolated medical clubs would be much lessened by the extension of the provident system throughout the less wealthy classes of society.

To turn now to some of the details of the scheme. In

the first place it must be distinctly understood that the object of the union is solely to regulate the financial arrangements between the medical men and their patients. Indirectly, no doubt, it will tend to lessen many abuses in the profession, but directly the union must not attempt to take any active part in the repression of unqualified practice, advertising, quackery, or any other evils which are or may become conspicuous. Every qualified medical practitioner who is willing to undertake to adhere to certain simple rules with regard to the fees he will charge his patients must be admitted to the union. No conduct, however unprofessional, must render a member liable to expulsion, except the one unpardonable sin in the eye of the union of accepting less than the fixed minimum rate of fee. Every medical man who joins the union must, in return for his undertaking not to charge less than the minimum fee to his private patients, be entitled to become a participator in the provident fund. He must, however, be absolutely free to refuse to attend provident patients at all or any particular patient of the class. The remuneration that each medical man shall receive from the provident fund must depend upon the number of provident patients actually attended by him. The duty of enrolling, registering, and expelling members, fixing the minimum fees and the scale of contributions to the provident fund, would be entrusted to a central executive council, while the detailed management of the provident fund would be undertaken by local committees. The districts over which the local committees should preside would most conveniently be determined by grouping together existing Poor-law areas. In such a district a meeting of all the medical men who were members of the union would be summoned at stated intervals to elect from among their number a small local committee. To this committee would be entrusted the duty of providing offices, appointing collectors, investigating claims of contributors to be admitted under the different scales of payment, and distributing among the members of the union their proper shares of the balance of the fund remaining after expenses had been met. Although the patients admitted to the privileges of the provident fund would be permitted to make contributions of varying amounts based upon their average earnings and the number of their families they would be entitled to identical privileges. They should be permitted to request the attendance of any practitioner in their district who was a member of the union. The patient having chosen his attendant and the medical man having accepted his patient, would each be bound to abide by his choice until the expiration of some definite period determined by the committee.

It is hardly necessary to go more into detail in explaining the local organisation required to carry out the scheme. Excellent provident dispensaries are to be found in all parts of the country, where the system indicated is worked upon a small scale, and succeeds despite the competition of hospitals, "cheap" medical men, and sixpenny dispensaries. The rules of such provident institutions, modified so as to considerably raise the wage limit and to provide a more complete sliding scale of contributions, might probably be adopted by the local committees. The two most frequent complaints brought against club practice as at present carried on are that the patients tend to become too exacting and that the medical officers are tempted to be inattentive. Under the suggested scheme inattention on the part of the medical officer would be punished by the loss of his patient and a corresponding diminution in the share of the provident fund, while the too-exacting patient would be sent from one medical man to another until he mended his ways or found that such constant unnecessary attendance was only to be obtained by paying for it at the private practice rate of fee.

It still remains to be shown in what way such a union can be utilised to remove the most conspicuous abuses of medical charity, and it is anticipated that no great difficulty will be met. There is little doubt that the managers and the medical staff of the hospitals are in earnest in their wish to find some way of ensuring that their charity shall be dispensed only to those who deserve or need it. The difficulty has hitherto been to find some satisfactory method of doing this. To set up a charity organisation department at each hospital has been almost the only practical suggestion offered by those who are most active in their complaints. The managers of the hospitals have for the most part rejected the proposal as both expensive and ineffective. By the formation of the union we have not only a simple method of identifying those whose financial position renders them deserving of medical charity, but also a means of bringing pressure to bear upon such hospitals as might be indisposed to restrict their charity within proper limits.

It does not seem unreasonable to ask the hospitals, when once a universal system of provident medical assistance is established, to refuse to give their services to any person who is not either a contributor to the provident fund or a suitable subject for Poor-law relief or who does not bring a certificate from a medical practitioner, stating that his illness is of such a nature as to require hospital treatment. Thus would the great abuse of hospital charity by those well able to afford to pay private fees be abolished. Thus, too, would the overcrowding of the out-patient departments be lessened. The managers, knowing that all patients of the poorer class could obtain medical attendance at the hands of general practitioners through the provident fund, would be quite willing to refuse hospital treatment to cases reported by their medical officers to be of a trivial description. The medical schools would especially benefit by this arrangement, for the general practitioners, having nothing to lose by the proceeding, would willingly send the interesting cases among their provident patients for consultation or for temporary treatment at the out-patient department. The department, freed from the crowd of patients with trivial ailments, and with the serious cases supplemented by patients sent for consultation, would be much improved as a centre of medical education. The out-patient officers, relieved of much irksome routine work, would be able to exercise their proper function of consultants to the provident class of patients, and would be able to spare time to forward reports to the general practitioners upon the cases sent up for a second opinion.

Is it possible to doubt that the profession as a whole and the vast majority of its units would benefit by the formation of such a union? Is it possible to doubt that the public, and especially that portion of it who are financially unable to bear the strain of a long illness, would benefit by the institution of such a universal system of mutual medical assurance?

Is it not possible to hope that there is sufficient public spirit to overcome the difficulties of bringing this reform about?

The greatest difficulties to be overcome are those of fixing the minimum fees for private patients and the sliding scale of contributions for the provident class. Fortunately such sums once fixed would not be irrevocable. If they can be fixed in the first instance so as to attract the majority of the profession to join the union and to enable the majority of the less wealthy public to become contributors to the provident fund the union would in a few years be powerful enough to revise its pecuniary position.

If the matter were of such a nature as to require Parliamentary action, which fortunately it is not, the first step in the proceedings would be to appoint a Commission. Let those members of the profession and of the general public who believe that the formation of a union on these lines would tend towards the general good provide an inquiry fund and appoint a representative Commission to investigate the subject. Such a commission, after hearing evidence, which would, no doubt, be willingly given by those interested in provident dispensaries, hospitals, and friendly societies, as well as by representatives of all classes of general practitioners, would be able at least to report upon the feasibility of the proposal, and if it appeared feasible would indicate the methods by which such a union might be brought into existence. The position of the administration of medical charity is getting almost unbearable. Any way out would be welcome. The present proposal is submitted to the profession in the hope that it may be considered worthy of serious consideration.

DIRECT REPRESENTATION ON THE GENERAL MEDICAL COUNCIL.—A meeting of Dr. Alderson's supporters will be held at 4 P.M. on Tuesday, Oct. 6th, at Bellvue House, 299, Lavender-hill, S.W., by kind permission of Dr. Barkwell, to report progress of his candidature and to consider what further steps shall be taken to ensure the election of Dr. Alderson as one of the direct members in the General Medical Council.

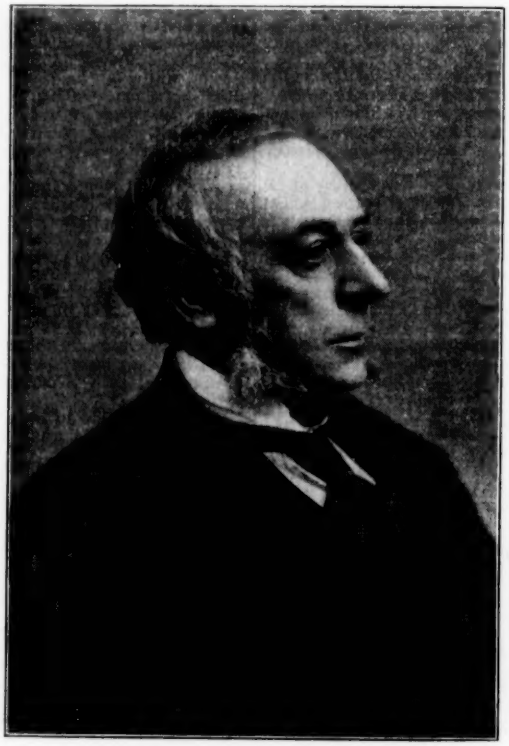
Obituary.

SIR JOHN ERIC ERICHSEN, BART., F.R.S., LL.D.,

PRESIDENT OF UNIVERSITY COLLEGE, LONDON; SURGEON-EXTRAORDINARY TO HER MAJESTY THE QUEEN; CONSULTING SURGEON TO UNIVERSITY COLLEGE HOSPITAL; AND EX-PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

IT is with feelings of great regret that we record the death of Sir John Eric Erichsen, who passed away on Wednesday afternoon, Sept. 23rd, at Folkestone, under circumstances which we described in our last issue.

John Eric Erichsen was born at Copenhagen on July 19th, 1818, being the eldest son of Eric Erichsen, a banker and one of a long line of merchants and bankers of that city. His mother was a Somersetshire lady of an ancient family in that county. The Erichsens during the latter part of the last and the beginning of the present centuries were one of the wealthiest and most respected firms in Copenhagen. The family residence is an architectural feature of the Danish capital and still goes by the name of *Le palais Erichsen*. John Erichsen was brought up in England and never revisited his birthplace until a few years ago. His early education was received at the Mansion House, Hammersmith, a large private school, whence he proceeded to University College, then in its infancy. His whole up-bringing was essentially English, but he acquired a perfect knowledge of both French and German, and was able to speak the former tongue with exceptional fluency and elegance. His pupilage was chiefly spent under the immediate charge of Sir Robert Carswell, the professor of pathological anatomy at University College, whose anatomical drawings are still famous. During his student days Liston was in the zenith of his career, and Erichsen being, as one of his former colleagues has described him, "a man born with surgical instinct, by nature and by taste a surgeon," devoted himself heart and soul to the art of which he was destined to become so distinguished an exponent. Armed with the wide knowledge he had acquired from Carswell, and endowed with a spirit of indomitable energy, it was not long before he made it manifest to his fellow students that he was a rival to be reckoned with. In 1839 he became a Member of the Royal College of Surgeons of England, and six years later became a Fellow (by examination) of that body. His connexion with the College was throughout his career very close. He was elected a member of the Council in 1869, of the Court of Examiners in 1875, and, finally, President in 1880. For a short time after the completion of his professional studies at University College he lectured on physiology at Westminster Hospital, after which he returned to his old hospital as assistant surgeon, where in the out-patient department Henry Thompson was one of his most diligent dressers. At the termination of the unsettled period at University College following on the death of Liston in 1847, when the advent and retirement of Syme and Arnott followed rapidly upon each other, Erichsen was appointed to fill the office of Professor of Surgery, and full surgeon to the hospital, which was remarkably good fortune for a man of thirty-two years of age. His first operation in this responsible capacity was a somewhat difficult lithotomy, and his pupils and colleagues were anxiously expectant that he should acquit himself well. His former pupil and first house-surgeon, Sir Henry Thompson, describes the theatre as having been crowded to excess, and recollects that he was deputed to "hold the staff." The operation was not an entire success, but this was not Erichsen's fault. The difficulties which he encountered were owing to the peculiar position of the calculus, while the patient's general health was much worse than had been supposed. The case will be found reported in full in THE LANCET[1] by Mr. (now Sir) Henry Thompson.



SIR JOHN ERIC ERICHSEN, BART., F.R.S., LL.D.,
PRESIDENT OF UNIVERSITY COLLEGE, LONDON.

Erichsen's defective vision was, in fact, an almost insuperable obstacle to his ever becoming a really brilliant operator, although he was a careful and dexterous one, and above all was very skilful in the after-treatment of his cases. His great skill in diagnosis, however, went far to compensate him for his affliction. He was essentially a sound reasoner with plenty of logical good sense. He dealt with facts.

Sir John Erichsen was in the completest sense of the word a general surgeon. He had approached his subject from many directions; he was a sound anatomist, a splendid pathologist, and had enjoyed the practice of the Parisian schools as well as that of University College with Liston as its brilliant leader. One subject, however, he made peculiarly his own, and that was concussion of the spine. He had an intimate acquaintance with the remote injuries to the nervous system caused by shock—more especially such as are commonly met with as a result of railway collisions and similar accidents. On this subject he published in 1866 six lectures which aroused wide and general attention. There were when these lectures appeared many authorities who altogether denied the existence of such a condition as concussion of the spine. The change of opinion, or rather increase of knowledge, upon this subject was in great measure due to the attention directed to the matter by Erichsen. The result of this association of his name with a set of symptoms which he had been the earliest to collate and describe was a very large accession of practice of a special nature. Those injured in railway accidents thought of Erichsen first as the surgical authority on the subject, while railway companies turned to him also as the fittest to defend them from disingenuous actions for damages.

Erichsen succeeded Richard Quain as Holme Professor of Surgery in 1866, and filled the office until 1875.

His great work, "The Science and Art of Surgery," appeared in 1853, and met at once with the approval that it obviously merited. There was really a necessity for a new work on surgery. So rapid had been the strides made in the

[1] THE LANCET, vol. ii., 1850, p. 575.

science that the "very bible of surgery," Samuel Cooper's work, had been by the laws of human progress left behind. Erichsen's work exactly satisfied this demand. His treatise was designed to form a text-book to his own systematic course of surgical lectures, and consequently the original issue contained no mention of diseases of the skin or eye. It was divided into three parts—namely, the First Principles of Surgery, Surgical Injuries, and Surgical Diseases. Under the first head the subject of Increased Vascular Action was discussed with a fulness of detail and a convenience and precision of arrangement which came as something quite new to the profession in a surgical text-book, where hitherto physiological discussion had either been absent or introduced unduly. In the chapters devoted to descriptions of the various amputations the results of personal experience were very evident. Many useful points which had escaped the notice of former writers, and which were unknown to the majority of the profession, were exalted to their proper place in surgical importance. To mention one example of the benefits he had received from Continental training, he advocated most strongly the use of starch bandages in cases of fracture. This method of putting up a fracture had been successfully used in fifty or sixty cases during the year 1852 by Erichsen, who had first seen the method while studying in Paris.

A chapter on the treatment of asphyxia was full of excellent practical hints, and proved quite new and unexpected reading. The subject had not previously received from surgical writers any particular attention, in spite of the frequency with which emergencies due to asphyxia arise in surgical practice, and the incalculable value of prompt and efficient treatment. Erichsen had won in 1845 the Fothergillian gold medal of the Royal Humane Society for an essay on this very subject, so that he was able to talk fully upon it having fully considered it.

The third division of the original book, relating to surgical diseases, was also complete and well written, although here he followed more upon precedent. The admirable account of hernia represented the knowledge of the day, the operative treatment being limited by the greater risk in the times previous to the employment of asepsis and antisepsis. The book at once established Erichsen's position as teacher, thinker, and critic in surgery. A man in methods or range more totally unlike Liston it would have been impossible to imagine, but on the appearance of the "Science and Art of Surgery" it was universally allowed that Erichsen was filling Liston's seat in a manner that reflected increased glory upon University College. The clear and easy style of composition, and the admirable illustrations, numbering, even in the first edition, upwards of 260, secured at once for the work the popularity with students and practitioners that it has ever since enjoyed. In all the treatise has run through ten large editions in this country as well as having been translated into nearly every European language. In America not only has the work been printed and pirated frequently, but during the Civil War the Federal Government had a special edition published and distributed to every surgeon in its service. By constant revision and enlargement it has been made to keep pace with the science it records, as the latest edition, that of 1895, edited by the late Mr. Marcus Beck and Mr. Raymond Johnson well shows: and it is as the author of this monumental work that Erichsen's name will live.

In medical politics he was a reformer and was to a considerable extent the originator of the periodical meetings of Fellows and Members of the Royal College of Surgeons of England, the first of which was held in 1870. In June, 1869, when he was a candidate for a seat on the Council of the Royal College of Surgeons he published a letter in our columns stating his views on the subjects connected with reform at the College. He then expressed himself with considerable candour, deploring the oligarchical form of government of that body by its Council, and strongly urged that periodical meetings of the Fellows should be held for the reception of reports from the Council, their discussion, and the general management of the business of the College. With regard to the composition of the Court of Examiners he avowed himself opposed to the custom of permitting a member of the Council to likewise be an examiner. He also advocated (1) the annual election of members of Board of Examiners; (2) the payment of examiners by fixed stipend, independent of the number of candidates; and (3) the permission for country Fellows to vote by proxy. At that date these reforms were held to be very drastic. In addition to the issuing of this manifesto Erichsen's candidature was supported in a somewhat injudicious way by the late Mr. Berkeley Hill, who canvassed the Fellows on his behalf. This solicitation of votes for Erichsen caused a good deal of adverse comment, but so high was the personal esteem in which he was held that he was elected in the following month, and took his seat on the Council distinctly pledged to aid in the carrying out of the four great reforms mentioned in his original letter. At the November meeting of the Council he brought forward the important question of the right of the Fellows to assemble in their own College. His proposition was unanimously received with somewhat unexpected approval. From this liberal attitude he later somewhat receded, taking an exaggerated view of the importance of the Fellows, but in spite of this he must always be counted among the reformers.

Among the honours which Erichsen received were the Doctorate of Laws of Edinburgh University; the Fellowship of the Royal Society; and the Honorary Mastership of Surgery of the Royal University of Ireland. He was also an honorary Fellow of the Royal College of Surgeons in Ireland, of the Royal Academy of Medicine of Belgium, of the Imperial Society of Physicians of Vienna, and of numerous learned societies throughout Europe and America. He was President of the Royal Medical and Chirurgical Society, 1879-81, and of the Surgical Section of the International Medical Congress in the latter year. He was a member of the Royal Commission appointed to inquire into the subject of Vivisection in 1875, and for some time was Inspector to the Home Office under the Cruelty to Animals Act. Sir John Erichsen was Senior Surgeon-Extraordinary to the Queen and had been President of University College for the past nine years. In January, 1895, Her Majesty conferred on him the honour of a baronetcy at the same time as on his old friend and pupil the late Sir J. Russell Reynolds.

There are few men who will be so greatly missed as Sir John Erichsen by all who knew him. His popularity with his colleagues and with his pupils was unbroken, and his genial hospitality and unvarying kindness earned for him the love and respect of all who had the privilege of his society. He had a great charm of manner and was a fluent and eloquent speaker, using a very pure and polished English. His amiability of disposition was very great and he was never troubled with jealousy. "He was always ready" says Sir Henry Thompson in a cordial and appreciative note on his deceased master, "to give a helping hand to a man if he were promising; if he were not, then Erichsen would cheer him up." His hospitality throughout his career was lavish. He frequently entertained large parties of foreign as well as English professional brethren, and on such occasions the winning and graceful kindness of Mrs. Erichsen (for she died before Sir John Erichsen received a tardy offer of a title) will be long remembered by all who experienced it. One memorable example of their hospitality comes to our recollection, although it took place over twenty years ago. In March, 1876, a dinner was given by him to his past house surgeons, when he had been surgeon to University College Hospital for over a quarter of a century. Out of the fifty gentlemen who had acted during this long time as his house surgeons no less than thirty-two were present. Sir Henry Thompson, who as before mentioned was the first to serve in the capacity of his house surgeon, and Mr. Watkin Williams, Q.C., M.P., who was among the earliest to occupy the post, sat on either side of their host.

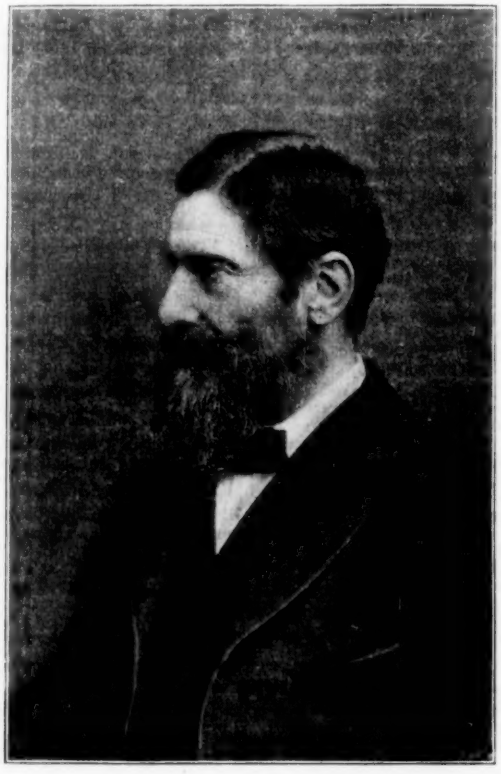
Mrs. Erichsen was the daughter of Captain Cole, R.N., and as she died in 1893 without family the baronetcy becomes extinct.

The funeral of Sir John Erichsen took place on Saturday, Sept. 26th, in the presence of a large gathering. The first part of the burial service was read at All Souls Church, Langham-place, the Rev. J. Lewin Govett, a kinsman of the deceased baronet, being the officiating minister. The conclusion of the service was held at Hampstead, Sir John Erichsen being laid to rest in Hampstead Cemetery beside his wife. By his own special request there were no floral tokens of respect.

SIR GEORGE MURRAY HUMPHRY, M.D. CANTAB., F.R.C.S. ENG., F.R.S.,

PROFESSOR OF SURGERY IN THE UNIVERSITY OF CAMBRIDGE.

Sir George Murray Humphry was born on July 18th, 1820, at Sudbury, in Suffolk, being the third son of Mr. William Wood Humphry, Barrister-at-Law. He received his early education at Sudbury and Dedham Grammar Schools, and in the year 1836 was apprenticed to the great Crosse of Norwich, author of the work on "Urinary Calculus," and then in the height of his fame as a surgeon. Crosse was one of the finest operating surgeons in England, and this in the days of Liston and Cooper meant much. From such a teacher, then, young Humphry imbibed the rudiments of his art and in addition to his close association with Crosse he had also the privilege of seeing the surgical practice at the Norwich Hospital, an institution which was then perhaps the most notable hospital out of the metropolis. He likewise saw plenty of general practice and became familiar with the ordinary routine of a busy surgery. Having learnt all he could at Norwich he proceeded to St. Bartholomew's Hospital in 1839, where Vincent, Lawrence, and Stanley were the surgeons, Latham, Burrows, and Roupell the physicians, and Paget the curator of the museum. To the teaching of all these men, but more especially to that of Lawrence and Paget, he always referred with the deepest gratitude. From his start he showed himself a pupil of more than ordinary promise, taking several prizes, and at the end of a year passing the first examination for the degree of Bachelor of Medicine at London University. In this examination he won the gold medal in anatomy. He passed the "College" and "Hall" in 1842, and in the same year was elected surgeon to Addenbrooke's Hospital at Cambridge, thus obtaining a position rarely vouchsafed to one so young—a position not only of honour and responsibility, but one affording a wide scope for the acquirement of sound experience. Although he had not in 1844 reached the statutory age of five-and-twenty the Royal College of Surgeons of England conferred on him the honorary title of Fellow. From his first appointment at Addenbrooke's Hospital he regularly delivered clinical lectures and also a short course of lectures on surgery, which latter were printed in the *Provincial Medical Journal* (1849–50).



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At this period he entered on his University course at Downing College, and at the same time did considerable general practice both in Cambridge and its immediate neighbourhood. Taken with his anatomy lectures and hospital work this was more than he ought to have undertaken and led at last to serious illness. From his earliest days he had shown evidence of pulmonary weakness, and his health at this period, though he struggled bravely against lassitude and the effects of overwork, was far from good. His appearance and habits at about the age of twenty-eight are thus described by an old friend and patient. "Mr. Humphry was a delicate-looking, dark-haired man of more than middle height, thin, and somewhat high-shouldered. He wore his hair rather long and perfectly straight. His gestures were restless and his whole manner gave one the idea that he did everything 'at full pressure.' His activity and ubiquity when a young man were little short of phenomenal; he never seemed to waste a moment in the day. Besides doing a good deal of practice in the town of Cambridge his services were in frequent demand in the surrounding villages. To these calls he usually rode on horseback. His manner at this period (1848) was sharp and at times almost brusque, but the kindly smile with which he accompanied his words banished all doubts that this was but a mannerism. Numberless stories are still told of his genuine kindness and unselfishness in these days. Many were the acts—small in themselves, but inestimable in the opinion of his patients—of quiet and unassuming charity that he performed during these years as a general practitioner, not only towards the poor, but in the homes of gentry in straitened circumstances. He had a habit of forgetting to take away his fee in such instances, and if he could not well do this without offence he chose some delicate way of refusing remuneration. After a time he found riding to see his patients too much for his somewhat weak constitution and travelled in a light dog-cart, not sitting on the driving seat, but by choice almost crouching on the back seat, for the joint purposes of avoiding the force of the wind and of facility in alighting, which latter act he always performed with remarkable agility. He was abstemious to a degree, lunching frequently on biscuits, and the interval between his regular meals was sometimes very prolonged."

In 1852 he graduated M.B. of the University of Cambridge and subsequently in 1856 as M.D. On the resignation of Dr. Clark — the Professor of Anatomy—he was elected to the vacant post, and therefore, owing to pressure of work, found it very necessary to curtail his practice in order that he might more fully devote himself to the development of the University School of Medicine, the interests of which ever occupied his most earnest thought.

By the statutes of the University it was provided that the stipends of the professorship of anatomy and of certain other professorships should be increased when vacancies occurred; and when the stipend of the anatomy chair reached a point sufficient to induce its holder to devote himself exclusively to its duties, which had become necessary in consequence of the increased and increasing number of the pupils, Humphry announced his willingness to resign and to be transferred to a professorship of surgery without a stipend if such a professorship were established. This offer was accepted in the spring of 1883. Humphry was elected Professor of Surgery, and Professor Macalister of Trinity College, Dublin, was elected Professor of Anatomy in his place. In 1859 he was elected a Fellow of the Royal Society and later he served on its council. In 1868 he was elected a Member of the Council of the Royal College of Surgeons of England, and was

re-elected in 1876; and from 1877 to 1887 he was on the Court of Examiners. He delivered the Hunterian Oration in 1879, and the lectures on anatomy and physiology in the College, as Arris and Gale lecturer, in 1872 and 1873. The subject of these lectures was Human Myology. He declined to be nominated for the offices of Vice-President and President of the College because he felt that the proper fulfilment of the duties of those offices would be incompatible with the fulfilment of his professorial and other duties at Cambridge. In 1869 he succeeded Professor Paget as representative of the University of Cambridge on the General Medical Council, Professor, afterwards Sir George, Paget having been elected President of that body. He acted on behalf of the Council as visitor of the examinations of the Universities of Scotland and Ireland and of the Royal College of Physicians of London in 1873–75, and was a member of the Executive Committee of the Council until his resignation in 1889. He was long a member of, and took an active part in, the British Medical Association, was for several years secretary to the Cambridge and Huntingdon branch, and President of the Branch. He delivered the Address in Surgery at the general meeting at Cambridge in 1856, presided in the Section of Anatomy and Physiology at Worcester in 1882, and was President of the Association at the general meeting at Cambridge in 1881. In his address on this last occasion he proposed that the association should undertake the work of collective investigation of disease, and he acted as chairman of the committee for that purpose. He was also a member of the British Association for the Advancement of Science, at some of the meetings of which he made communications; and at the Nottingham meeting (1867) he presided in the Physiological Section and delivered an address, which was printed in Vol. I. of the "Journal of Anatomy and Physiology." At the Royal Institution in London in 1870 he gave six lectures as part of the Fullerian course on the Architecture of the Human Body, and in January, 1872, he gave a lecture on Sleep to the same popular society. He took an active part in the formation of the Cambridge Medical Society and was President for some time. He delivered the Rede Lecture before the University of Cambridge in 1880, the subject being, Man: Past, Present, and Future. He was a vice-president of the Sanitary Institute of Great Britain, presided at its annual meeting in 1882 in London, and presided at the Congress held in Glasgow in 1883. He served on the council of the senate of the University of Cambridge and took an active interest in university affairs. He was an honorary fellow of his College (Downing), a corresponding member of the Imperial Society of Surgery of Paris, and a foreign associate of the Anthropological Society of Paris.

He was elected a Professorial Fellow of King's College, Cambridge, in 1884, and was President of the Pathological Society of London in 1891. He was President of the Anatomical Society of Great Britain and Ireland, an honorary Member of the Society of American Anatomists, and was similarly honoured by many learned societies both on the Continent and in America. He was made an honorary Doctor of Laws of Edinburgh in 1891, in which year he also received the honour of Knighthood. At the Tercentenary of the University of Dublin he was made a Doctor of Science, and in the same year (1892) received the freedom of his native town of Sudbury.

His literary works, though not voluminous, embrace a wide array of subjects. His great work on the "Human Skeleton" established for him a world-wide reputation as an anatomist of great learning and also of great originality. It was closely followed by an "Essay on the Coagulation of the Blood in the Venous System during Life," which THE LANCET said showed its writer to be "an acute and accurate observer." "Observations on the Limbs of the Vertebrate Animals" appeared in the next year, and proved what his first work had indicated, that he was a great comparative anatomist as well as a great human anatomist.

His popular work on the "Human Foot and Human Hand," published in 1861, earned for him the unanimous praise of the reviewers. It contained much valuable matter, and the method in which many novel points were brought before the reader could not fail to interest not only the professional but the lay reader. It even went into such curious questions as the origin of the custom of wearing the wedding ring on the left hand, and also demonstrated the well-known reasons for the corkscrew being invariably turned in the same direction. These works, together with the article upon "Diseases of the Male Organs of Generation" in Holmes's System of Surgery, comprise Humphry's literary output, without reference, of course, to lectures and addresses, presidential and otherwise. But there was this to be said about his purely literary work—it was all first-rate, all of his very best.

Such is a bare record of Humphry's life, a life of arduous single-minded toil, crowned with complete success in each direction in which he strove after it. We have not attempted to draw morals from it, or further describe the man, because we are in the fortunate position of being able to offer to our readers the following graphic sketch of his old master from the pen of one of Sir George Humphry's ablest and most attached pupils:—

To those who were privileged to know the late Sir George Humphry well as a teacher, a surgeon, and a friend many points in his composite character little observed or recognised by mere casual acquaintances became evident. He delighted in teaching for the sake of instruction and the opportunity of being brought into close acquaintance with young men. To him the imparting of knowledge to others was always a pleasant and grateful task. While it must be allowed he was sometimes severe upon the stupid or careless, he was full of helpfulness and kindly feelings towards the earnest worker. The leading features of his teaching were strict accuracy of observation and expression. He was a great advocate for note-taking as an educational exercise. Many who read these words will have no difficulty in conjuring up the remembrance of their old teacher, always seated on his high stool by the bedside, rubbing together his hands and listening with a glistening eye and severely critical aspect to clinical statements, which the reader, often to his discomfiture, was made then and there to verify. His acknowledged pre-eminence as a teacher was mainly due to his insisting upon accuracy. Misty statements deducted from doubtful palpation or dubious stethoscopic sounds had no value to his logical mind. His methods of case-taking exemplified what is not generally known, that notes to be worth the paper on which they are written as really trustworthy records of disease are matters of great labour, and if large numbers of cases are taken by one man hurried for time such observations must be well-nigh useless. Those students who took notes under Humphry will smilingly recollect his oft-quoted aphorisms, "Eyes first, fingers next, ears last!" They had the opportunity of acquiring a knowledge of the nature and value of evidence and a sense of the due proportion of symptoms in a diagnostic point of view. The teacher especially insisted upon prominently bringing before the mind symptoms of real importance upon which reliance could absolutely be placed, and would spend half an hour laboriously instructing his class how to feel fluctuation with certainty or to look through a hydrocele. The tabulated arrangements of note-taking so prevalent in some metropolitan hospitals he treated with derision. No student who had worked under the Professor of Surgery at Cambridge would ever start the diagnosis of a fatty tumour by asking the patient what his occupation was, whether he had sustained an accident, and if his progenitors died from cancer! Not that Humphry neglected details in a case, but he ever gave them a subordinate place, and advanced into prominence symptoms of reliability and importance as those which should principally occupy the diagnostician's mind and attention. It was probably a life-long cultivation of these principles which gave him the rare power of at once grasping the essential features of a difficult and obscure case of disease and the faculty of expressing his views upon it with clearness and sound judgment. The writer has always thought that Humphry as a surgeon possessed much of what is termed the clinical instinct, really the result of years of laborious observation, which made the late Sir William Gull so famous as a physician. Those of his pupils who were wise enough to recognise the priceless value of his rare faculty, accurate clinical instruction, came in contact with him at that period of their careers when the mind is susceptible to impressions which remain engraved upon it while life lasts. The popularity and fame which Humphry acquired as a teacher induced numbers of young men to enter the profession who possessed the internal qualities as well as the external manners of gentlemen, and he has done more than any one man to better the position of medicine in the social scale. It is no exaggeration to affirm that the principles he inculcated and insisted upon, though a provincial teacher, have taken such deep root in the minds of many with whom

he was brought into contact, that the seed sown by him is quietly and silently taking root in the metropolis, and is influencing the clinical teaching of surgery more deeply than is generally recognised.

In the position of an examiner Humphry was generally just and kind; he was a liberal "marker," though his questions were put in so clear and searching a manner, and accompanied by such acute and penetrating glances, that the nervous candidate was apt to be considerably perturbed. Tricky queries and obscure theories formed no part of his examination code. He held to the wise adage that examinations should be educational. As a man is examined, so will he study. The bent of all his questions was towards testing whether a candidate had thought as well as read, and if he had observed and verified for himself by the bedside the phenomena of disease. A good man had nothing to fear from Humphry, but he was the terror of that somewhat extensive class of candidates who think they can acquire knowledge of a difficult and responsible profession by a three months' course of desultory reading a "cram-book" and an occasional lounge in the wards so the out-patient department. As a lecturer he was original, entertaining, and most impressive and instructive. He had the peculiar and rare faculty of dwelling upon points of importance, and so illustrating and garnishing them with practical and theoretical details that no intelligent hearer could fail to be taught as well as interested. In lecturing on anatomy he never would fall into the common error of delivering a "cut-and-dried" discourse, but taking some one structure he would dwell upon it, and so illustrate the practical usefulness of knowing about it, that it was the fault of his audience if they did not both learn and remember. On the subject of osteology he was peculiarly instructive. Many physicians and surgeons, whose hair is silvered, will remember how he clothed the rather dreary details of "borders and surfaces" with delightful anecdote and copious references to comparative anatomy. Indeed, he was perhaps one of the few teachers of whom it may be said, "He made the dry bones to live." The same qualities rendered Sir George Humphry an excellent public speaker. His delivery was clear and deliberate; he generally said the right thing in the right place; and his power of persuasion over opponents was so remarkable that the writer has known those who went to a meeting determined to oppose him at all hazard become before the end of it confused and humble supporters of the very principles they had previously to the conclusion of his arguments been determined to oppose.

But if Humphry was a laborious anatomical worker he was also an intrepid surgeon, and here the many-sided traits of a remarkable character became very evident. It is not generally known—nay, perhaps, hardly believed—that, as with many successful men in every rank of life, he was peculiarly anxious and nervous regarding his professional duties. Before and after difficult and important operations in private practice he was full of apprehension, and has himself said that he often suffered from sleeplessness, great mental anxiety, and disquietude. Any reader of physiognomy who attentively studied Humphry's refined features could easily recognise that both his mind and body were essentially cast in a delicate mould. When the writer once attended him for a slight scalp wound he suffered from attacks of syncope even on changing the dressings. Long country journeys and serious operations exhausted him, so that he would sink to sleep in the railway carriage and sometimes pass the station. On one such occasion he left a train in motion and sustained a severe injury to his knee. This did not prevent him from attending to his duties as an examiner at the Royal College of Surgeons of England. As he was sitting, pale and ill, with his limb in a splint, a nervous candidate pardonably mistook his examiner for a patient and began to question him. This always caused Humphry great merriment and was the basis of several good stories among the undergraduates. Once embarked in an operation, however, he was perfectly firm and self-reliant. He had an absolute contempt for sudden and severe hæmorrhage. Increasing difficulties or unexpected dreadful emergencies never made him quail; on the contrary, he became the more cool and collected. Accustomed to operate in the days when anæsthesia was still in its infancy he would undertake operative proceedings in a lonely farm or remote village with the help only of his anæsthetist which many surgeons would hardly have dared to attempt without abundant aid and trained assistance. His instruments were few. The dressings were often of the most simple character and the ligatures were frequently plain hemp. His resource amid the inconveniences of country surgery was very great. A bunch of candles bought at the village shop tied in a bundle and all lighted together formed an excellent and convenient illumination for an operation. His physical strength, on several occasions severely tried by illness, was never great, and the efforts with which he carried on his many professional and educational duties wearied his fragile frame, and could only have been effected by the exercise of a most determined will, combined with inflexible and indomitable perseverance. Those who know the history of the Cambridge Medical School are fully aware of how Humphry overcame the bitter opposition to anatomical study and human dissection in the university and eastern counties. Through a judicious combination of persuasive advocacy, mingled with a perseverance nothing could turn aside, he ultimately effected his purpose, not without severe struggles, and even personal risk.

He delighted in his hospital work, especially in the out-patient department, which he held was full of instructive value to the students. The poor country folks far and near sought his aid, especially in cases of stone, which were numerous, and in the treatment of which he excelled, seldom losing a case unless in a very diseased individual. Indeed, his reputation among the poor, not only in Cambridge, but all over the eastern counties, was quite extraordinary, and much resembled the simple faith of our ancestors in wizards or necromancers. They approached him not without fear, but always with profound faith, and his verdict was received as one which in matters of life or death left no room for appeal. He had the character among the public of Cambridge and the vicinity of being "too fond of the knife," a reputation often obtained by medical men in the country who have the skill, ability, and courage to carry out great surgical operations. The arrival of Humphry's carriage in a country village was always an event for the inhabitants, who would peep over blinds or through half-closed doors or stand in small groups whispering together to see the great surgeon enter the house of sickness. Whatever operation was there performed never lost in magnitude or extent in the telling! While he executed most of what may be termed the ordinary operations of surgery with excellence and celerity, there were certain procedures he never would touch or undertake. The writer has only once seen him attempt lithotrity, and never excise the hip-joint or elbow. A case of cleft palate he was always ready to resign with a quiet smile to the care of one of his colleagues. He was an early advocate, on the other hand, for excision of the knee, in which operation he was most successful, performing it even in late adult life. His predilection for this operation travelled beyond professional circles, and a hospital patient would sometimes preface a consultation with the remark, "Now I'm not going to have my knee-joint took out." Humphry, like his *confrère* and friend, the late Sir William Savory, never leaned enthusiastically towards antiseptic surgery. His principles were complete rest and leaving things alone. His cases of amputation treated on the open principle created much attention at the time. His acute mind was one of the first to recognise that there was no real virtue in the "messes" which, under the names of healing ointments or lotions, surgeons were apt to heap upon newly-made wounds. In excision of the knee, for instance, he would secure the limb with absolute immobility upon a splint, cover the parts with cotton wool and bandage, and leave all alone for two months. At the expiration of this time the parts were almost invariably soundly healed, but it must be confessed that the associated septic processes and odours were such as would have shocked the susceptibilities of a strict disciple of Sir Joseph Lister. When some improvements of a modern nature were contemplated in the old operating room he did not resign to destruction his black operation-coat, which had done him yeoman service for an unknown period, without a gentle struggle with his subordinates. He was an occasional exponent of such old-world methods of practice as setons, venesection and "pea issues." In removal of the mamma for cancer, he encouraged suppuration in the wound, as he believed it tended to lessen the danger of recurrence. While some of these proceedings would not meet with the approbation of modern surgeons many can testify to the strikingly beneficial effects of a seton upon chronic cerebral pain after injury.

Humphry treated cases of tetanus by giving nourishment in all possible ways and tobacco smoking to excess. Good port wine was his favourite internal remedy. This

treatment always soothed the patient, and the writer has seen three cases recover under it. This is an instance of his originality in the treatment of disease. His after-management of operations was exceedingly simple. He seldom gave alcohol and still more seldom medicine, and he held, too strongly in the estimation of many, that the subcutaneous injection of morphia was much abused. It is right to state that Humphry paid as much care and attention to his hospital as to his private patients. He would often visit bad cases at the hospital at nights when much in need of rest himself. If he considered that many of the minor operations of surgery should be performed without anæsthetics, it may be pointed out that he carried the same principles into all branches of his practice. Indeed, his private patients in his consulting room submitted with quiet resignation to the performance of operations which only the strong personality and great reputation of the operator could command. Like many surgeons of his day he was great at practical details, and was never ashamed with his own hands to compose a bread poultice.

He commonly took his holidays abroad, and visited continental hospitals and museums, seldom failing to bring back safely packed in a portmanteau some fragments of humanity which would enrich the Cambridge collection. Indeed, he looked upon the museum as only second to the hospital in importance. Humphry has often told me that he turned every moment in his life to some account. Even his severe illnesses were not without their utility, for his dangerous attacks of phlebitis furnished medical literature with one of the best monographs on the subject of venous thrombosis which has ever been written. He was an enthusiastic collector of pathological specimens. His collections of osseous changes in the upper end of the femur was extensive, and some of the preparations were obtained by no little trouble.

Anyone who worked long with Humphry and knew him intimately could not fail to perceive that he possessed a most astute and subtle intellect. In his character were combined the qualities which without great education make a man distinguished in any walk of life. We do not enough recognise that he was one of the few original and accurate thinkers of our medical age. What he said was generally the outcome of deep thought and was usually right. Any subject he wrote about was so exhausted that not much was left for the investigations of future workers. His "cogitations" were sometimes so profound that he became absent-minded. His hat, coat, or umbrella had often to be sought with difficulty from different parts of the hospital at the end of a visit. On more than one occasion he had to return to his house from the residence of a patient to fetch the appliances for an operation previously arranged. Like most men who have risen to eminence by their own exertions without having their early energies blighted by excessive examinations, he possessed a large and varied knowledge of the world and an intimate acquaintance with that composite subject, the nature of human beings. Yet with all this he was not invariably a reliable judge of individual character, and on some few occasions he possibly took erroneous views of a man's true nature or abilities.

His power of retort and repartee, though good-humoured, was always exceedingly keen. Some of the best intellects in the profession were careful when they crossed swords with Humphry, and in the witness-box counsel undertook his cross-examination with a politeness which is very unusual in courts of law. On one such occasion a barrister asked him if he was accustomed to lose many of his cases, whereupon Humphry replied without hesitation that he did not conduct his surgical cases like the cross-examiner his legal ones, *otherwise he would lose them all.*

Through his singular knowledge of managing human beings and his power as a persuasive speaker he was enabled to hold his own in many a stormy controversy, from which his opponents often emerged in a somewhat subdued condition. In spite of opposition—sometimes strenuous—he was the leader and director of medical matters at Cambridge for well-nigh half a century. His few enemies, repeatedly discomfited by his shrewdness and resource, did not hesitate to level at him the charge of possessing more than a due share of what is generally called "worldly wisdom." Whatever evidence of the truth of this charge existed in the character of Humphry it was completely overshadowed by qualities which without flattery can only be termed kind, generous, and lovable. His most heated arguments were never embellished with the abuse and vituperative language which too often disgraces medical controversies. He never spoke ill of those who attempted to thwart or traduce him. He was extremely simple in his modes of life and severely economical of his own comforts. He was charitable in a quiet manner and would sometimes relieve the poorer hospital patients out of his own pocket. In a secret and unostentatious way he possessed deep religious convictions without a narrow-minded adherence to dogma or creed. For many years his figure was familiar among the Sunday congregation in the beautiful chapel of King's College. At one time he did a very large private practice, but the fees he demanded were far less than what, from his great eminence as a surgeon, he had a right to expect and receive. His surgical judgment as to whether an operation should be performed or not was never warped by the desire to obtain large fees, and was consequently implicitly trusted. His home life, brightened by a most excellent and devoted wife, was singularly bright and happy, and the true liberality of his character was shown in his unbounded hospitality. For years he kept "open house" to medical visitors at Cambridge. The table at "Grove Lodge" was continually surrounded by groups of guests to whom he made a charming and agreeable host. The vast majority of Cambridge medical students, young men of whom he knew little, and whom perhaps he would seldom see again in after life, dined in relays at his hospitable board.

He was, indeed, never so pleased as when surrounded by young people, and this was one of the many reasons which kept his mind so young and his heart warm, and so closely bound him to his beloved Cambridge, which he never tired of repeating was one of the best places in the world to live in. His pleasures were both social and intellectual, as his surgical qualities were scientific and practical. His delight was in the duties of his life, and as such he has over and over again told me that he was a truly happy man. Humphry took extraordinary interest in the progress and welfare of his pupils, not only collectively, but also as individuals. Few teachers take the trouble to reprove unsatisfactory workers. Many a man now in practice can give heartfelt thanks to him for much kindly advice or a well-meant and timely rebuke for laziness and carelessness. The remedy thus administered was often drastic and sometimes gave lasting offence to those who were both foolish and conceited, but the after progress of the case would generally justify the course pursued. To his more intimate friends his kindness and hospitality were almost lavish. He never forgot young men he thought to be hardworking and deserving. He would spare no pains to further their progress in life and assist their bitter struggles by advice or personal interest. Many now holding good positions in the profession must feel, with the natural emotion on the departure of a very dear friend, that they owe much of their knowledge to the principles which he inculcated and the best part of their professional position to his personal interest and support unsparingly given. He never fell into the common error of checking the progress or thwarting by unjust opposition or neglect the opportunities of struggling and rising men. This mistake, which in life reaps its own unpleasant reward and is a certain symptom of an inferior mind, he never committed. As a consequence his juniors loved his character as they respected his knowledge, and were ever ready to seek his opinion and thus maintain him in actual practice long after he had ceased to be an active operator. The closing years of his life were cheered and brightened by esteem and regard, not embittered and clouded by the cold neglect and aversion of those whose flickering stars were rising upon the horizon as the sun was setting behind it.

Many men win respect and admiration, some command fear, but no born leader of men was ever known who did not possess as his talisman natural kindness and sympathy, which, however concealed beneath a rugged exterior, became evident to his confidants and bound his subordinates to him with the silken fetters of affectionate esteem. To Humphry more than to most men hero worship has been rightly and freely given. Generations of medical men educated at Cambridge regard him with veneration and genuine regard.

When it became evident to his large circle of friends and acquaintances that his health was gradually but surely giving way before the insidious advances of a fatal malady expressions of sorrow and regret were everywhere heard. One of his last kindly generous acts was to entertain at dinner, singly or in small groups, many of his old pupils with whom he had kept in touch. It was too evident, perhaps to himself as well as his guests, that it was for the last time. His

mind was clear and his conversation intellectual and brisk, but his bodily powers were obviously failing rapidly. His death came to none as a surprise, but to all as a sorrow. His departure removes one of the greatest medical figures of our time from the ever fast-fleeting pages of contemporary history. His decease deprives the University of Cambridge of one of her highest ornaments and the town of an illustrious citizen and a good and useful man. As his personal qualities were so many and varied, so this imperfect sketch may show that his character was in many ways unique. He stood alone, and no one, however famous and able, can ever replace the blank he has left at Cambridge. The whole town is gloomy and sombre, everyone is sad, and "the mourners walk about the streets." In truth, his death has left a void in many hearts; it has snapped with a harsh and jarring note the silver cord of perfect human friendship. If he has raised for himself in the Cambridge School of Medicine a monument more lasting than brass, a warmer monument will be kept for him in all our memories while life lasts. In the consoling words of that beautiful funeral anthem the melody of which has floated through the magnificent chapel in which he weekly bent the knee as a worshipper, his body is buried in peace, but his name liveth for evermore.

The funeral took place at the Mill-road Cemetery, Cambridge, on Tuesday, Sept. 29th. The first portion of the burial service was read in the chapel of King's College, the officiating clergy being the Rev. Professor Ryle and the Rev. A. J. C. Allen. The University of Cambridge was represented by the Vice-Chancellor, and, in addition to Lady Humphry and other members of the family, there were present among others the heads of many colleges—Professors Sir G. G. Stokes, Macalister, Michael Foster, and a very large number of Sir George Humphry's old pupils.

HENRY SHARP TAYLOR, F.R.C.S. ENG., L.S.A.

GUILDFORD has lost its oldest medical practitioner and one of its most widely known and respected inhabitants by the death of Mr. Henry Sharp Taylor, who passed away, after a short illness, at Harrogate, on Sept. 19th. He was born at Guildford on Sept. 21st, 1817, and after receiving his early education in the grammar school of that town, he went to University College Hospital, London, to study medicine. There he was a contemporary of Sir John Erichsen, Sir Richard Quain, and Mr. John Marshall, and became house surgeon to Mr. Robert Liston. After studying for some time in Paris he returned to Guildford, and joined his father, Mr. J. H. Taylor, in practice in Quarry-street, where he resided until his death. He married a Miss Taylor, who, with an only daughter, survives him. He was a member of the governing body of the Guildford Grammar School and one of the administering trustees of the Poyle charity, besides holding various medical appointments. He was buried on Thursday, Sept. 24th, in the cemetery overlooking his native town in the presence of a large gathering of relatives, the medical profession, and friends of all classes. Mr. Taylor had a striking and dignified presence, with handsome features and a remarkably piercing eye. Unfortunately from youth he had suffered from partial deafness, which increased with years, but he was a man of great activity both of mind and body, thought deeply, and was plain and incisive in speech. His manner was characterised by true courtesy and unaffected kindness, to which was added the charm of a singularly clear and melodious voice. He had a well-stored mind and a retentive memory, with an unusual quickness of observation and a genial nature, which made him a most valued colleague and a delightful companion.

Two subjects connected with his profession to which he especially devoted himself were hospital construction and management and the administration of the Poor-law. In the latter he strongly supported the "humane" treatment of the poor and was an advocate for out-door relief. As regards the former, he took a leading part in the foundation and subsequent work of the Royal Surrey County Hospital at Guildford, visiting many hospitals both at home and abroad to ensure that the new building should follow the best models. Its new Home for the Nurses will also owe much to his recent labour in inspecting similar institutions in other towns. On the opening of the hospital in 1866 Mr. Taylor was elected its senior medical officer and became consulting medical officer in 1877. To the end of his life he regularly attended all consultations and operations and followed the work in the wards with the keenness of a real student. As an operator he was bold and dexterous and he possessed great power of diagnosis. Taking a noble view of the responsibility of his profession, he was unsparing of labour and thought in the treatment of his patients. By them he was held in honour, and he was regarded with especial veneration by the poor.

"His high endeavours were an inward light
That made the path before him always bright."

KENNETH McLEAN, M.B., C.M. EDIN.

THE death of Kenneth McLean, M.B., C.M. Edin., at the early age of twenty-three, has cast a gloom over all connected with the Edinburgh Royal Infirmary. The youngest son of the late Rev. Daniel McLean of Lanark, he was educated at the Royal High School, Edinburgh, spent two years in the Arts Classes of the University, and graduated M.B., C.M., in 1895. While a student he distinguished himself in many of his classes and acted as Demonstrator of Anatomy under Professor Sir Wm. Turner. In 1894-95 he was one of the honorary secretaries of the Royal Medical Society and at the beginning of last winter was elected one of its presidents, an honour which of itself expressed the high opinion held of him by the past and present members of that historical society. He acted as clinical assistant in the special wards in the Edinburgh Royal Infirmary under the charge of Mr. Cathcart from October, 1895, to April, 1896, when he was appointed house surgeon to the wards of Mr. A. G. Miller, senior surgeon to that institution. On Sept. 9th, whilst at work, he became suddenly unwell, and an obscure illness culminating in anæmia terminated fatally on the morning of Sept. 18th. He was buried in the Grange Cemetery on Monday, Sept. 21st, the respect in which he was held being manifested by the large and representative gathering of the medical, surgical, and nursing staff present at a service held in the chapel of the Royal Infirmary. Those who knew Kenneth McLean well can best appreciate the extent of the loss caused by his premature death. Quiet and unostentatious in manner, an able, earnest, and conscientious worker, he promised fair to become an honourable and respected member of his profession and an ornament to his Alma Mater.

REPORT OF THE COMMISSIONERS OF LOCAL PRISONS AND DIRECTORS OF CONVICT PRISONS (ENGLAND AND WALES) FOR THE YEAR ENDING MARCH 31ST, 1896.

IT has hitherto been the custom for the Commissioners of Local Prisons and the Directors of Convict Prisons to issue separate reports; this year, however, in accordance with the recommendations of the Departmental Committee on Prisons, the two reports have been amalgamated and the details, statistical and otherwise, relating to the respective systems are given together as far as possible. Since the publication of the report the whole system of prison administration has met with violent denunciation in certain organs of the daily press, and the cry has again gone forth for further reform. The methods of those engaged in the agitation appear to display a lack of discrimination, for in close proximity to the very columns which paint in vivid language the woes and disabilities of prisoners paragraphs are to be found minutely depicting the details of freshly occurring crime. While the memory of these offences lasts a measure of punishment commensurate to the magnitude of the crime is sternly demanded, but no sooner has the punishment begun than the culprit becomes an object of solicitude, for whom deterrent treatment is uncalled for and reformation only is to be aimed at. The pages of the blue-book do not convey the impression that the authorities as yet contemplate the establishment of penal colleges, if they may be so termed, such as exist at Elmira and Concord in the United States. It is more than questionable whether the average British criminal is ripe for technical education,

science and art classes, the study of music, and other high ideals, for, notwithstanding the time that the Education Acts have been in force, the report of the committee which recently inquired into the educational status and requirements of prisoners is not altogether of an encouraging nature, and shows that in a considerable proportion of criminals the standard of education is still at a low ebb. Although the reforms at present inaugurated by the Commissioners do not embrace any such far-reaching schemes as those above referred to, their remarks show that a spirit of progressive enlightenment animates the efforts of the Board. Amongst other improvements it is pleasing to note that no longer will the youthful offender run the risk of contamination from contact with adult prisoners. Steps have been taken to ensure that juveniles sentenced to imprisonment for periods of a month and upwards will be kept entirely apart and located in selected prisons. The medical staffs of Holloway, Manchester, and Liverpool prisons are to be strengthened by the appointment of an additional assistant medical officer. This has been a matter of urgent necessity for some time past, on account of the multifarious duties devolving on the medical staffs by reason of the large number of prisoners daily received into those establishments, and the amount of care and attention which has to be devoted to remand cases, especially those whose mental condition calls for investigation. A training school for officers will shortly be started at Chelmsford prison, and an extended course of instruction for probationers has been drawn up, the particulars of which will be found in the appendix to the report. This scheme cannot fail to be of much assistance in enabling them to grasp the details of the various duties which they will be called upon to perform, but it is to be hoped that provision will be made for affording officers some elementary knowledge of criminology, for the services of intelligent warders trained to observation would prove of much value in noting the demeanour and general behaviour of the numerous cases suspected of mental unsoundness. Some instruction in the principles of first-aid might also be added, for effective assistance would then be readily available in the event of any accident or casualty, and the slight knowledge of superficial anatomy thus gained could not be otherwise than useful to officers engaged in anthropometrical work. An improved scale of dietary has been introduced for prisoners employed at hard labour in convict prisons. The report of the medical inspector deals, for the most part, with the vexed question of insanity in prisons. The number found to be insane during the year was 479, being an increase of 90 over that of the previous year. Dr. Gover has no difficulty in showing that this increase is, in great measure, due to the growing practice of remanding to prison for mental observation persons whose sanity appears doubtful. He also points out that many wandering lunatics find their way into prison and are there certified. Full details of all the cases of insanity are given in Table E, and it will be seen from the tabular analysis of the insanity statistics that 192 persons remanded for observation were found to be insane, and were so reported to the courts; 114 were ascertained to have been previously insane, and of the total number of 479 lunatics no less than 404 were mentally unsound on reception. The analysis further shows that of the different phases of mental disease noted 6 per cent. of the cases suffered from congenital imbecility, 3 per cent. from epilepsy, 9 per cent. from general paralysis, 30 per cent. from the various forms of mania, 16 per cent. from melancholia, 24 per cent. from monomania and delusional insanity, and 14 per cent. from dementia. Eleven cases of insanity occurred in the convict prisons. The effect of prolonged imprisonment upon the mental condition of convicts has lately given rise to much discussion in connexion with the release of certain individuals whose cases have occupied a large share of the public attention. Two of these men have evidently made rapid progress towards recovery both as regards their mental and physical health. Their friends wisely adopted precautionary measures to prevent them being suddenly subjected to any undue mental strain or excitement. Another, notwithstanding his alleged mental infirmity, judiciously adopted a similar course, and, leaving his sympathetic but demonstrative well-wishers, concealed his identity under the guise of a farm labourer. The remaining individual has not been so fortunate; he was sent direct to America, and according to published accounts his state of mind appeared disordered. No authentic information is forthcoming as to the precise medical grounds on which release was granted, but even assuming for the sake of argument that his mental condition was not altogether stable, the excitement of a semi-public welcome was certainly not the best means adapted to hasten his recovery. A person who has lived for some time in a darkened atmosphere cannot but feel bewildered when suddenly brought into the broad glare of noon; and likewise a man who has undergone a long term of penal servitude must feel a sense of strangeness on liberation, and a period of rest and quietude is necessary in order that he may become accustomed to his altered environment. In the case in question the demonstrative reception evidently disconcerted him, and he showed a manifest distaste, and even violent aversion, to the overtures of friendship he was met with. The excitement thus suddenly thrust upon him was calculated to upset his nervous equilibrium, and it is possible that it may have aided in producing that condition of mania which is said to have landed him in the padded room of a lunatic asylum. Had he been quietly received and allowed time to accustom himself to his new surroundings a different result might have been recorded.

The total number of prisoners received into the local prisons of England and Wales during the year was 166,846, while the average daily population was 14,394; these figures are somewhat higher than those of the previous year. Exclusive of cases of pregnancy, 52 prisoners were released on medical grounds. The deaths numbered 92 or 6·3 per 1000 of the average daily population. Brain disease, not including alcoholism and delirium tremens, accounted for 6 deaths, epilepsy for 3, and pneumonia was fatal in 9 instances. In twenty-six cases death occurred within a week of the prisoner's reception; some of them were in a state in which they ought not to have been sent to prison. The sanitary arrangements of the prisons in general appear to be most satisfactory, for in no instance was death the result of any form of zymotic disease. The average daily population of the convict prisons for the year was 3220; the number of deaths, all from natural causes, was 26, or at the rate of 8 per 1000. That the prison system is capable of improvement is not open to doubt, but the authorities may be trusted to introduce gradual and well-considered reforms, which will meet the requirements of the service better than the revolutionary changes advocated by those who hold extreme views on the subject.

THE LEGALITY OF BRITISH QUALIFICATIONS ABROAD.

(*Continued from p. 771.*)

TERRITORIES OF AMERICA.

Arizona.—Registry, with a county recorder, of an unrevoked, uncancelled "diploma, regularly issued by a medical college properly and lawfully organised under the laws of the State wherein said college shall be located."

Indian Territory.—(*a*) Cherokee nation: an examination by the Board of Medical Examiners. (*b*) Choctaw nation: a certificate based upon a diploma or upon an examination by the Board of Medical Examiners. (*c*) Creek nation: payment of $25 annually as a licence fee.

Oklahoma.—A licence issued by the Superintendent of Public Health upon a medical diploma or after examination.

New Mexico.—A certificate upon the diploma of a legally chartered medical institution in good standing or on an examination by the Territorial Board of Health. (1895.)

District of Columbia.—Licence issued by a board of medical supervisors, consisting of the Presidents of the three boards of medical examiners and two persons, not physicians, one of whom shall be learned in the law, to be appointed by the district commissioners. No more than two members of the board shall be adherents of any one system of medicine. Examination fee not to exceed $10.

Alabama.—County medical societies exist in all the sixty-six counties and examine none but graduates of reputable medical colleges; non-graduates are examined only by the State Board. Diplomas do not confer right to practise except after successful examination by a county society. (1873, 1876.)

Arkansas.—The county courts appoint a board of medical examiners who are required to examine all applicants and determine whether they are "qualified to practise medicine and surgery." (1895.) The diploma confers no right to practise.

California.—Licences are issued on diplomas examined and passed as to genuineness and identification by one of the boards of examiners of the three schools. The boards have published a standard of minimum requirements for collegiate instruction which determines when a college is "in good standard." Examination of non-graduates has been discontinued since Dec. 31st, 1876. (1876, 1878.)

Colorado.—Similar to California, except that there is but one State board of medical examiners and no action is known to have been taken as to minimum requirements.

Connecticut.—A certificate of registration to be issued by the State Board of Health on the diploma of a college "recognised as reputable by one of the (three) chartered medical societies of the State," or a certificate of satisfactory examination by a committee appointed for the purpose by the State Board of Health from such societies, is required. (1893.)

Delaware.—Similar to Pennsylvania.[1] Examinations on diplomas only. A candidate must present a written application to the secretary of the Medical Council accompanied by the examining fee of $10, with proof that he is more than twenty-one years of age, of good moral character, having had a competent common school education and four years of medical study, including three regular courses of lectures in different years. There are two boards: "The President and Fellows of the Medical Society of the State of Delaware," and "The Homœopathic Medical Society of Delaware State and Peninsula." (1895)

Florida —A certificate of satisfactory examination by the State (or a district) Board of Medical Examiners is necessary. Diplomas confer no right to practise.

Georgia.—A diploma, after three years' course, confers a right to practise only after satisfactory examination by a State Medical Board. There are three boards, the "Regular," the "Homœopathic," and the "Eclectic," each of which may make its own rules and regulations. Boards can only examine those "who are graduates of an incorporated college, school, or university that requires three full courses of study of six months each." (1894.)

Idaho.—The record of a diploma at a county seat is required.

Illinois —A certificate is issued by the State Board of Health upon the diploma of a legally chartered medical institution in good standing as determined by the Board, or upon a satisfactory examination by the Board. (1877, 1887.)

Indiana. — Registration in a county clerk's office of a diploma "from some reputable medical college" is necessary. (1885, 1891.)

Iowa.—Certificates are issued upon diplomas on examination under conditions similar to Illinois requirements. (1886.)

Kansas.—A diploma confers a right to practise upon verification by the State Board of Health as to its genuineness, the standing of the college, and the identification of the holder. Non-graduates may practise upon satisfactory examination.

Kentucky —A certificate from the State Board of Health issued upon the "diploma of a reputable and legally chartered medical college." (1893.)

Louisiana.—A licence is issued upon a diploma and an examination, both to be satisfactory to one of the two medical boards, one from "the Louisiana State Medical Society and the other from "The Hahnemann State Medical Society." The subjects for medical examination are prescribed by statute. Applicant must be "twenty-one years of age, of good moral character," and possess "at least a fair primary education." (1894.)

Maine.—After Jan. 1st, 1896, the State Board of Registration must examine all applicants, the examination in subjects prescribed by statute to be "elementary and practical in character." Previously to examination the applicant must present satisfactory proof of "possessing a reasonable amount of average knowledge in the branches of the science he desires to practise in." (1895.)

Michigan —The record of a diploma in a county clerk's offices is sufficient. (1887.)

Minnesota.—A certificate is issued upon examination by the State Board of Medical Examiners. Diplomas confer no right to practise, and only graduates can be examined. Branches for examination are prescribed by statute, and the Board is permitted to enlarge. Examination papers peculiar to any school have to be passed by members of the board of that school, and to be "both scientific and practical, but of sufficient severity to test the candidate's fitness to practise medicine and surgery." After Jan. 1st, 1899, four full courses of lectures of at least twenty-six weeks each—no two in the same year—will be required. (1887; amended 1895.)

Mississippi.—A certificate is issued upon examination by the State Board of Health. Diplomas confer no right to practise. Branches are prescribed by statute. Non-graduates may be examined. (1892.)

Missouri.—Same as Illinois. The Board regulation prescribes that a college to be in good standing shall be a college in which the course of instruction is a "graded" one. (1883.)

Montana.—A diploma does not confer right to practise; but after verification of its genuineness, proofs that its holder has attended four courses of lectures of six months each and evidence that it was issued by a "medical school legally organised and in good standing, whose teachers are graduates of a legally organised school," the State Medical Board shall examine—their examination to be "both scientific and practical, but of sufficient thoroughness and severity to test candidate's fitness"—and if the candidate be found qualified to issue a certificate entitling him to practise. Only graduates can be examined. The branches for examination are set forth in the statute, but may be enlarged if the board deems it advisable. The board is not separated into schools. (1895.)

Nebraska.—A certificate is issued by the State Board of Health upon the diploma of a legally-chartered medical school or college "in good standing" (1883), which is defined by the Act of 1891 as follows: "A medical school or college requiring preliminary examination for admission to its courses of study, and which requires as requisite for the granting of the degree of M.D. attendance on at least three courses of lectures of six months each, no two of said courses to be held within one year, and having a full faculty of professors in all the different branches of medical education."

Nevada.—The record of a diploma issued to "a graduate of any authorised college without respect to school" is necessary. (1875.)

New Hampshire.—The Act of 1891 repealed a former statute; since then there have been no legal requirements.

North Carolina.—A licence issued upon a successful examination by the State Board of Medical Examiners, who are appointed by the Medical Society of the State of North Carolina. Branches are prescribed by statute; diplomas confer no right to practise. Non-graduates may be examined. (1859.)

North Dakota — A licence issued upon a successful examination by the State Board of Medical Examiners. Diplomas confer no right to practise.

Ohio.—No licence required No State Board of Medical Examiners. Before practising medicine in any of its departments or performing surgical operations, a person shall have attended two full courses of instruction and graduated from a school of medicine either in this or a foreign country, and must produce a certificate of qualification from a State or county medical society. Ten years' practice is a virtual compliance with this requirement.

Oregon.—A certificate on the diploma of a college in "good standing," or examination by the State Board of Medical Examiners is required. (1891.) Amendment of 1895 not yet published.

Rhode Island.—"A diploma from a reputable and legally chartered medical college, endorsed as such by the State Board of Health," or "such examination as said board may require" is necessary. (1895.)

South Carolina.—A certificate of verification of the diploma of a reputable medical college is necessary. The Act of Dec. 24th, 1890, abolished the State Board of Medical Examiners, created by the Act of 1888, under which the diploma conferred no right to practise.

South Dakota.—A licence issued by the State Board of Health after examination. Diplomas confer no right to practise. Only graduates of "lawful medical colleges," of good moral character, and who have attended three full courses of medical lectures of six months each—no two full courses within the same year—are entitled to examination. (1893.)

Tennessee.—A licence on the diploma of a college in "good standing," or after examination by the State Board of Medical Examiners. (1889.)

Texas.—A licence issued after examination by a district

[1] THE LANCET, Sept. 12th, 1896, p. 771.

board of medical examiners. Diplomas confer no right to practise. Non-graduates may be examined. (1876.)

Utah.—A board of examiners is appointed from the various recognised schools of medicine. The board issues certificates "to all who furnish satisfactory proofs of having received degrees or diplomas from chartered medical colleges in good standing, and pass a satisfactory examination." (1894.)

Vermont.—The registering of a diploma endorsed by one of the boards of medical censors, or a certificate of examination by one of the boards. (1880.)

Virginia.—The State Medical Board—appointed one from each congressional district on the recommendation of the Medical Society of Virginia, and two homœopathic physicians nominated by the Hahnemann Medical Society of the Old Dominion—is "to examine all persons who desire to commence the practice of medicine, and to issue its certificate upon 'an examination satisfactory as to efficiency.'" (1894.)

Washington.—A licence is issued after examination by the State Board of Medical Examiners. Diplomas confer no right to practise.

West Virginia.—Only "such persons as shall pass an examination before the State Board of Health and shall receive certificates from said board to that effect," are entitled to practise. No definite preliminary education either academic or professional, is required. "When applicant professes the homœopathic or eclectic school, physicians from that school of medicine shall be called to the assistance of the State Board of Health." (1895.)

Wisconsin.—"Any person competent to give expert testimony in a suit-at-law is competent to practise medicine. The graduates of any accredited medical school are permitted to practise without examination before a board." A penalty is prescribed for the use of the title of M.D., or Dr., by any person not a graduate of a medical school.

Wyoming.—The record of a diploma with a registrar of deeds.

NEW ZEALAND.

Young medical men without family ties which bind them to the shores of the "old country," and who have made up their minds to practise in some other clime and perchance have their attention directed to the "Britain of the South," may find the following particulars regarding the colony of New Zealand from a medical point of view of some interest. Many young medical men have arrived in New Zealand brimful of the hope of an early promise of a lucrative practice awaiting them. Let us warn them, as we have done before, that, unless they go out with a sufficient stock of worldly goods to commence with, New Zealand is not the Elysium that it was only a few years back. Competition for public appointments is remarkably keen and requires just as much "influence" to attain the desired object as in the mother country. As a rule, in the larger centres when the practice is established the fees for general practitioners is, as far as actual money is concerned, far above the average of the fees usually obtainable by general practitioners at home; but, on the other hand, living, clothing, and the maintenance of house and servants—the latter being very expensive luxuries—soon dispel the rosy hue which the fees may offer to those who are eking out an existence in Great Britain. The average fee obtainable by the general practitioner is *7s. 6d.* per visit; midwifery from 3 to 5 guineas, or more, according to the status of the patient; but here, perhaps, the advantage ceases. Operative work is not, as a rule, generously responded to in the way of remuneration. It is because the majority of the people are of the labouring or middle-classes who are struggling themselves to make both ends meet. The majority of the thrifty members of the community belong to "clubs"; some of the members of these clubs joined their respective lodges during "hard times," but are saving enough still to adhere to, and obtain the benefits from, these societies even after they have attained affluent surroundings. These are the people who think they ought to receive the best possible medical and surgical attention and skill at the lowest possible remuneration and occasionally fight hard to maintain this opinion. Every man finds his own level in the colonies much sooner—acting by himself and without influential aid—than he does in the old country. Those who are well equipped in knowledge and with a not too empty purse we believe can acquire, after a little patience—certainly not so much as is required in England—a practice which will, with energy, zeal, and determination, at the present rate of growth of the population end in satisfactory results. This can be said of any colony under the British flag, but New Zealand has a healthy climate nearly all the year round. This may, to use a colonialism, "cut both ways"—it often does; sometimes there is heavy work to do and sometimes nothing. Intending "emigrants" who are content to tackle a newly-rising township and rise with it have socially and physically a hard life before them. Many a man has started in this manner, and only after years of struggling and excessive hard work has reaped his reward. We would advise all medical men going to New Zealand to master, as far as possible, the "special departments" of the profession. They never know when they may be called upon to perform any operation. Success in this direction means success generally. We must remind intending "emigrants" that there is a medical school in this colony where students—many with very considerable influence—are annually presented after examination with their diplomas. As a rule these students (rightly, too) do not commence practice prior to paying a visit to the old country and obtaining degrees there. Most of these men have been well grounded at the Otago University, and, being led into the way of work, follow on in this line at home, not omitting any opportunity of attaining practical knowledge, and ultimately not only do themselves great credit, but reflect the same on their New Zealand University.

The population of New Zealand, according to the census returns for the beginning of this year, is 804,923. Of this number there are a little over 41,000 Maoris. This return means, as far as the medical profession is concerned—and from a practical standpoint—that there is a population of about 764,000 people (for the native work must not be seriously put into the scale) who may or may not need medical assistance. The number of medical practitioners in a young colony is sure to be of a more or less fluctuating character, various attractions wafting them here and there, according as circumstances arise. There are 646 medical men on the Register of whom 204 have left the Colony. About 5 per cent. of those remaining are graduates of the Colony. The average number of medical men to the population is, about 1 to every 1480 of the population. We may say, briefly, that for a duly qualified registered English medical man there is no examination to pass or Government forms to comply with, nor is any previous residence in the colony necessary to at once commence practice.

THE SOUDAN CAMPAIGN.

VERY little remains to be said in regard to this campaign. If the troops have had relatively little fighting they have, nevertheless, had to encounter a good deal of disease and discomfort, heat and hardship. The expedition has so far accomplished its purpose. The power of the Khalifa is broken, the sheiks have submitted, and the British troops are returning to Cairo. Dervish fanaticism in the Soudan is no longer a force to be reckoned with. That is, summarily stated, the position at the present time. It is gratifying to know that, apart from all political considerations, and real or alleged reasons for the undertaking, it has affected really good purpose as far as the unfortunate tribes in the Soudan are concerned. It has freed them from the galling oppression to which they have been subjected under Dervish rule. The advance of the Egyptian force has been warmly welcomed by the inhabitants, who are everywhere returning to the cultivation of their fields and crops. We can only hope that by a settled and just rule, and the opening up of the Soudan by roads and railways and river traffic, the material prospects of the country will soon be greatly improved, and that the population will be free henceforth to follow their pursuits under happier conditions. When the losses from sickness and mortality have been counted up it is to be feared that the sum total of these will prove considerable, but taking into account the climate and the nature of the service, the losses from cholera and fever, and the difficulties which the expeditionary force has had to encounter, the campaign, from a medical as well as a military standpoint, has been uncommonly well done. On all sides we learn that the medical service has done exceptionally hard and good work, and we hope

that this fact will be recognised when the time arrives for apportioning the rewards of the campaign.

The medical history of the expedition will be interesting, and when it comes to be written we shall not only know the amount of cholera, fever—enteric and other—sunstroke, and dysentery that occurred and the conditions that gave rise to them, but we shall then be in a position to form some estimate of the amount of sickness from which the troops were spared by the sanitary and hospital arrangements that were made.

As regards the epidemic of cholera which has existed in Egypt for about a year, it is now rapidly declining, and there is every reason to believe that it will have altogether disappeared before the time arrives at which visitors usually proceed to Cairo and the Nile. In Lower Egypt only a few isolated cases have been notified of late, and a very marked decrease of the disease has taken place in Upper Egypt.

ELECTION OF DIRECT REPRESENTATIVES TO THE GENERAL MEDICAL COUNCIL.

MR. GEORGE JACKSON has sent us the following address to the registered medical practitioners of England and Wales, in which he announces himself as a candidate for one of the vacancies on the General Medical Council:—

LADIES AND GENTLEMEN,—Having been nominated by the Council of the Incorporated Medical Practitioners' Association as a candidate at the forthcoming election as a Direct Representative on the General Medical Council, in conjunction with Messrs. Brown and Rentoul, I have much pleasure in placing myself at the service of the profession in England and Wales. I have now for many years taken a great interest in all questions affecting the welfare of the medical profession, having been an early advocate of the Medical Sick Assurance Society, medical defence unions, and the like.

Last year I occupied the position of President of the Incorporated Medical Practitioners' Association, and also that of President of its first branch—viz., the Devon and Cornwall.

If you do me the honour to elect me I shall do all in my power to safeguard the interests and welfare of the profession at large. Amongst much-needed reforms I would especially advocate the following:—

1. Reform of the Medical Acts so that the Council should be entirely elected by, and be representative of, the profession generally.

2. To give the General Medical Council increased power to deal with every form of quackery and unqualified practice.

3. To act in conjunction with those members of the Council who will—at the request of their constituents—urge on the Council the duty of helping those members of the profession who have been so grievously wronged and prevented from obtaining their lawful dues as guaranteed them by the fact of their registration as medical practitioners. I refer to the well-known case of Mr. R. Anderson.

4. To endeavour to check the action of those societies who employ agents to tout from house to house, and otherwise exploit the profession, by placing restrictions upon the employment of registered practitioners by them.

5. To oppose any legislation which would by legalising midwives convert them into independent practitioners.

6. To endeavour to raise the standard of entrance examinations and establish one conjoint compulsory examination for each division of the United Kingdom.

Asking for the favour of your vote and interest,

I remain, your obedient servant,

GEORGE JACKSON, F.R.C.S. Eng.,

Ex-President and Vice-President of the Incorporated Medical Practitioners' Association; ex-President and Vice-President of the Devon and Cornwall Branch of the Incorporated Medical Practitioners' Association.

SUCCESSFUL VACCINATION.—Mr. Percy Howard Day, public vaccinator for the Stalmine District of the Garstang Union, has been awarded, for the fourth time in succession, the Government grant for efficient vaccination.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Salford Urban District.—Mr. Charles E. Paget reports that out of a total of 5318 deaths occurring in the district during 1895, 281 were certified by the coroner and 124 were not certified either by a medical practitioner or coroner; Mr. Paget insists that no death should pass uncertified, and that in every case where a satisfactory medical certificate is not forthcoming a post-mortem examination should be held. The notified cases of diphtheria have been undergoing a decrease in Salford since the epidemic of 1889 and 1890, but Mr. Paget states that this diminution has been accompanied by increased severity in the type of the disease. The Ladywell Sanatorium is, Mr. Paget reports, increasing in popularity, and during 1895 as many as 52·86 of the notified cases of infectious disease were isolated there; in 1890 the percentage was but 39·0. During the year 1895, due in the main to the development of the Manchester Ship Canal, there was a considerable increase in the number of steam boilers in use in the borough, but it is satisfactory to be able to record that in every case proper smoke-preventing appliances have been provided. The Female Health Visitors of Salford, of whom there are now six, have continued, relates Mr. Paget, to do excellent work in their districts.

Plymouth Urban and Port District.—Mr. F. M. Williams reports that the scheme for increasing the water-supply of this important town and for affording a constant, in place of an intermittent, service is rapidly progressing. At present the capacity of the service reservoirs is equal only to a three days' supply, and hence there is no guarantee of a plentiful service of water during periods of drought. Mr. Williams is in favour of the notification of measles and whooping-cough; he thinks that even without isolation accommodation much good would accrue from the information obtainable, and that since the public elementary schools are "the most potent *foci*" for the spread of these diseases the coöperation of the School Board and sanitary authorities would be productive of much good. In respect of tuberculosis Mr. Williams advocates the periodical examination of all dairy cattle, as also that of every animal before slaughter. Mr. Williams is in a position to speak on the repeal of the Contagious Diseases Act, and he says that it behoves public health authorities to advocate measures enabling syphilis to be adequately dealt with. In his report upon the Plymouth Port Sanitary District he calls attention to the abolition of the Quarantine Acts by the Public Health Act, 1896, and he thinks that now they are repealed much vigilance will be necessary to prevent the spread of infectious disease, as persons will be able to visit or leave vessels as they please.

Durham County District.—An outbreak of enteric fever in the urban district of Consett has been made the subject of a special investigation and report by Dr. Eustace Hill, the county medical officer of health. The outbreak derived additional interest from the fact that it occurred simultaneously with one in the adjoining district of Leadgate, which was thought by Dr. Hill to be due in large part to an accidental pollution of the water in the mains supplying the district. Leadgate and Consett are supplied with water from the same reservoir, but as this reservoir also supplies other districts which were not invaded by enteric fever the pollution of the reservoir would not explain the outbreak. In the case of Consett there were no temporary conditions of the water-main similar to those observed in the Leadgate district, and, on the whole, Dr. Hill is inclined to absolve the water-supply, although he still looks with some suspicion on the ball-hydrants and the possibility of lateral in-suction through joints which had become defective through subsidence from coal workings. Similarly, Dr. Hill is unable to incriminate the milk-supply, although much of it is apparently drawn under eminently insanitary conditions. After considering all the evidence Dr. Hill is of opinion that emanations from specifically polluted ash-pit privies, and perhaps also from infected drains and sewers, were responsible for the epidemic, while personal infection was, too, he thinks, a factor of some importance. The cases presented some interesting clinical features, as also did those in Leadgate.

Marked constipation was common, and in many of the patients the usual symptoms of the disease were either absent or poorly developed. As was the case at Leadgate, so at Consett there was much delay (sometimes of several weeks) in notification, and, as Dr. Hill remarks, notification of that kind is practically valueless. Dr. Hill also thinks that in some cases the disease was not recognised. The value of notification has obviously limitations, and over and above the cases notified there are probably always others which remain unrecognised.

Surrey County District.—Dr. Edward Seaton, the medical officer of health for Surrey, has been very prompt in the preparation of his report for the year 1895. The county council expressed a wish that the report should be issued in May and Dr. Seaton has been able to carry the request into effect. The report for 1894 was a very full one and intended, as Dr. Seaton points out, as "a record, a review, and a guide"; the report for 1895 professes to be merely a record of the progress made during the year. The district reports are now presented in a better form than was the case in 1890, an improvement which is attributable to the efforts of the county council. The general death-rate for the county during 1895 was 13·5 per 1000, as against 13·7 during the six years 1889-94; the infantile mortality was at the rate of 113 per 1000 births, as compared with a rate of 107 during the preceding six years; the zymotic death-rate for the year was 0·94 per 1000. The Notification Act appears now to have been adopted throughout the county of Surrey, and Dr. Seaton states that the district medical officers have coöperated heartily with him, and so enabled him to issue regularly the monthly returns. We are glad to see that systematic house inspection is being steadily proceeded with in the county, and that the better-class houses at places such as Surbiton, to which attention was drawn by Dr. Seaton in 1892, are receiving attention in this respect. Dr. Seaton does not speak hopefully of the action of district councils in respect of trade effluents, local interest being found in practice difficult to overcome.

St. Helen's Urban District.—Considerable energy is manifested in St. Helen's with respect to measles, and Dr. John Robertson insists in his current annual report on the benefit which would be derived from providing isolation accommodation for that disease. Great difficulty is experienced in St. Helen's in obtaining early notification of measles, and during the epidemic of 1893 it was ascertained that in more than 60 per cent. of the invaded houses no medical man was called in, a fact which indicates, as Dr. Robertson observes, that even if the disease were made notifiable a large number of cases would, unless notification by the householder were rigidly enforced, fail to be discovered. During the year under review every house in which measles occurred was disinfected, and Dr. Robertson states that this course, coupled with isolation and school closure, was attended with excellent results. With regard to diphtheria, it is interesting to hear that within recent years this disease has not shown any tendency to increase in St. Helen's. Enteric fever shows at times a very marked tendency to prevail in this district, and during 1895 there were 257 cases notified, the sickness rate per 1000 of the population being no less than 3·2. Dr. Robertson furnishes a chart in his report showing the association between the prevalence of the disease in the district and the soil temperature at a depth of four feet, the enteric fever (allowance being made for incubation) rising and falling very regularly with the earth temperature. Dr. Robertson notices several instances in which enteric fever was apparently contracted by direct infection from a previous case. An inquiry was made into each case of death from diarrhœa which occurred in St. Helen's during 1895, and it was found that 85·16 per cent. of the deaths under three months of age were "bottle-fed," as against 14·8 per cent. "breast-fed," while of the deaths between three and six months of age, 85·6 per cent. were "bottle-fed" and 14·4 per cent. were "breast-fed." Anthrax caused one death in St. Helen's during 1895, the victim, who was employed in bone manure works, having inoculated himself while scratching a "pimple." The infection was derived, it was thought, from shoddy dust, dried blood, or dry Bombay bones.

Ormskirk Rural District.—The sanitary authority of this district provided through Mr. Herbert Peck, the medical officer of health, facilities for the bacteriological examination of cases of supposed diphtheria, as also a supply of antitoxin for the treatment of such cases as proved to be diphtheria. Advantage was, Mr. Peck reports, freely taken of these opportunities and much good has, he thinks, resulted both from the antitoxin treatment and from the information afforded by bacteriological examination. The Ormskirk District Council is to be congratulated on having acquired a site for an isolation hospital, together with a building which they propose, pending the erection of a proper hospital, to use for isolation accommodation.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 5900 birth and 3178 deaths were registered during the week ending Sept. 26th. The annual rate of mortality in these towns, which had declined in the nine preceding weeks from 24·8 to 15·1 per 1000, rose again last week to 15·3. In London the rate was 14·9 per 1000, while it averaged 15·6 in the thirty-two provincial towns. The lowest death-rates in these towns were 9·7 in Croydon, 9·9 in Portsmouth, 11·0 in Halifax, and 11·6 in Plymouth; the highest rates were 19·3 in Manchester, 20·4 in Bolton, 21·7 in Hull, and 23·3 in Gateshead. The 3178 deaths in these towns included 405 which were referred to the principal zymotic diseases, against 487 and 417 in the two preceding weeks; of these, 118 resulted from diarrhœa, 84 from diphtheria, 60 from whooping-cough, 50 from scarlet fever, 50 from "fever" (principally enteric), and 43 from measles. The lowest death-rates from these diseases were recorded in Brighton, Derby, Bristol, and Bradford; and the highest rates in Birkenhead, Wolverhampton, Cardiff, and Hull. The greatest mortality from measles occurred in Halifax, Gateshead, and Hull; from scarlet fever in Oldham; from whooping-cough in Swansea, and Birkenhead; from "fever" in Sunderland; and from diarrhœa in Cardiff, Liverpool, Bolton, Preston, and Wolverhampton. The 84 deaths from diphtheria included 61 in London, 7 in Birmingham, and 4 in Cardiff. No fatal case of small-pox was registered last week in any of the thirty-three large towns. There were 6 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, Sept. 26th, against 16, 12, and 7 at the end of the three preceding weeks; one new case was admitted during the week, against 2, 1, and none in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 3951, against numbers increasing from 3370 to 3805 on the six preceding Saturdays; 466 new cases were admitted during the week, against 484, 316, and 453 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 118 and 152 in the two preceding weeks, further rose last week to 166, but were 41 below the corrected average. The causes of 43, or 1·4 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Leicester, Nottingham, Bradford, Leeds, and in fourteen other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Liverpool, Manchester, and Blackburn.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 15·9 and 17·3 per 1000 in the two preceding weeks, declined again to 14·4 during the week ending Sept. 26th, and was 0·9 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 10·1 in Greenock and 11·2 in Leith, to 15·7 in Paisley and 15·9 in Glasgow. The 420 deaths in these towns included 43 which were referred to diarrhœa, 9 to measles, 9 to whooping-cough, 8 to scarlet fever, 5 to diphtheria, and 3 to "fever." In all, 77 deaths resulted from these principal zymotic diseases, against 77 and 88 in the two preceding weeks. These 77 deaths were equal to an annual rate of 2·6 per 1000, which was 0·7 above the mean rate last week from the same diseases in the thirty-three large English towns. The 43 fatal cases of diarrhœa showed a decline of 11 from the number in the preceding week, and included 28 in Glasgow and 7 in Edinburgh. The deaths referred to measles, which had been 14 and 7 in the two preceding weeks, rose

again to 9 last week, all of which were recorded in Glasgow. The 9 fatal cases of whooping-cough exceeded by 3 the number in the preceding week, and included 5 in Glasgow and 2 in Edinburgh. The deaths from scarlet fever, which had been 10 in each of the two preceding weeks, declined again to 8 last week, of which 4 occurred in Glasgow, and 2 in Edinburgh. The 5 fatal cases of diphtheria corresponded with the number in the preceding week, and included 2 in Glasgow, where 2 of the 3 deaths referred to "fever" were also recorded. The deaths from diseases of the respiratory organs in these towns, which had been 55 and 56 in the two preceding weeks, declined to 45 last week, and were 37 below the number in the corresponding period of last year. The causes of 31, or nearly 8 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 21·8 and 22·1 per 1000 in the two preceding weeks, declined again to 15·5 during the week ending Sept. 26th. During the thirteen weeks of the quarter ending on Saturday last the death-rate in the city averaged 23·3 per 1000, the rate during the same period being 18·8 in London and 15·4 in Edinburgh. The 104 deaths registered in Dublin during the week under notice showed a decline of 44 from the number in the preceding week, and included 17 which were referred to the principal zymotic diseases, against 22 and 14 in the two preceding weeks; of these, 8 resulted from diarrhœa, 4 from scarlet fever, 3 from "fever," 2 from whooping-cough, and not one either from small-pox, measles, or diphtheria. These 17 deaths were equal to an annual rate of 2·5 per 1000, the zymotic death-rate during the same period being 2·0 in London and 2·3 in Edinburgh. The fatal cases of diarrhœa, which had been 9 and 7 in the two preceding weeks, were 8 last week. The deaths from scarlet fever, which had been 2 in each of the two preceding weeks, rose to 4 last week. The deaths referred to different forms of "fever," which had been 5 and 2 in the two preceding weeks, rose again to 3 last week. The 2 fatal cases of whooping-cough showed a further decline from the numbers in recent weeks. The 104 deaths in Dublin last week included 16 of infants under one year of age, and 25 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons were below those recorded in any recent week. Three inquest cases and 1 death from violence were registered; and 33, or nearly a third, of the deaths occurred in public institutions. The causes of 8, or nearly 8 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ARMY MEDICAL STAFF.

SURGEON-CAPTAIN J. DONALDSON embarks at Southampton for Malta. Surgeon-Major W. Dugdale, doing duty at Cairo, has been selected for service under the Egyptian Government. Surgeon-Major Battersby has been ordered from Aldershot to Ireland, for duty in Dublin. Surgeon-Major J. R. Forrest and Surgeon-Lieutenants J. M. Buist and J. Walker have been placed under orders for service in India.

The following appointments are announced:—Brigade-Surgeon-Lieutenant-Colonel James Williamson, M.B., F.R.C.S.I., to be Surgeon-Colonel, vice W. T. Martin, M.D., retired. The undermentioned Surgeon-Lieutenant-Colonels to be Brigade-Surgeon-Lieutenant-Colonels:—Thomas Joseph Gallwey, M.D., vice W. F. Stevenson, promoted; William Simson Pratt, M.B.; and William Briggs Allin, M.B., vice W. F. Burnett, promoted.

INDIA AND THE INDIAN MEDICAL SERVICES.

The services of Surgeon-Captain J. Chaytor-White, lately Officiating Civil Surgeon, Jaunpur, are replaced at the disposal of the Government of India, Home Department. The services of Brigade-Surgeon-Lieutenant-Colonel F. A. Smyth (Bengal) are placed temporarily at the disposal of the Government of the North-Western Provinces and Oudh. The services of Surgeon-Captain W. G. Pridmore, M.B., are replaced at the disposal of the Military Department. Brigade-Surgeon-Lieutenant-Colonel James Arnott, M.D., Bombay Medical Establishment, takes the place of Surgeon-Major-General P. S. Turnbull, retired. William Flood Murray, M.B., has been appointed Brigade-Surgeon-Lieutenant-Colonel, vice Brigade-Surgeon-Lieutenant-Colonel F. C. Nicholson, retired. Surgeon-Major Wallis, A.M.S. is transferred from the Sind District to the Aden District.

The following appointments are announced:—Surgeon-Lieutenants to be Surgeon-Captains:—*Bengal Establishment:* Cecil Robert Stevens, M.D., Cecil Charles Stuart Barry, Leonard Rogers, Ernest Alan Robert Newman, Gordon Travers Birdwood, Jay Gould, Reginald George Turner, James Davidson, and John Mulvany. *Madras Establishment:* Eric Harding Sharman, Thomas Stodart, Bhola Nauth, and Thomas Howard Foulkes. *Bombay Establishment:* Patrick Percy Kilkelly. The Queen has also approved of the retirement from the Service of Brigade-Surgeon-Lieutenant-Colonel George Massy, Bengal Establishment. The Queen has approved of the following admissions to Her Majesty's Indian Medical Service:—To be Surgeon-Lieutenants:—*Bengal:* Herbert James Walton, Hugh Ainsworth, Albert Edwin Hayward Pinch, Henry Arthur David Dickson, and John Stewart Stevenson. *Madras:* John Wolfran Cornwall, Alfred Miller, Frederick Arthur Lucas Hammond, Henry Robert Brown, Walter Guyon Richards, Sydney Price James, Archibald Nicol Fleming, Peter Dee, Felix Oswald Newton Mell, Frank Dennis Browne, and Maxwell Dick. *Bombay:* Frank Addinsell Smith.—The *London Gazette*.

NAVAL MEDICAL SERVICE.

The following appointments are announced:—Fleet-Surgeon Valentine Duke, M.B., to the *Thunderer*, additional, for Pembroke Dock (temporary). Staff-Surgeons: Edward Fergusson to the *Vulcan*, additional and for appointment when recommissioned; James H. Beattie to the *Rainbow*; George R. D. Charlton to the *Anson*, when recommissioned; and Henry W. D. Walsh to the *Endymion*; Surgeons: George A. S. G. Bell to the *Vulcan*, when recommissioned; Cyril J. Mansfield to the *Endymion*; and William G. Peck to the *Anson*, additional.

ARMY MEDICAL RESERVE OF OFFICERS.

The undermentioned officers have been appointed Surgeon-Captains:—James Mill, M.B., 5th Volunteer Battalion the Royal Scots (Lothian Regiment); and Robert Sinclair Smith, 1st Volunteer Battalion the Black Watch (Royal Highlanders).

VOLUNTEER CORPS.

The following appointments have been made:—*Artillery:* 1st Sussex (Eastern Division, Royal Artillery): Surgeon-Lieutenant T. Fuller, M.D., resigns his commission. 1st Cinque Ports (Eastern Division, Royal Artillery): Surgeon-Captain J. W. T. Gilbert, from the 1st London Volunteer Artillery, to be Surgeon-Captain. 1st Ayrshire and Galloway: Surgeon-Captain J. Thomson, M.D., to be Surgeon-Major. *Royal Engineers:* 1st Hampshire: Surgeon-Lieutenant J. W. Compton, M.B., resigns his commission. *Rifle:* 1st Volunteer Battalion the Royal Scots Fusiliers: Surgeon-Captain W. McAlister, M.B., resigns his commission. 1st Volunteer Battalion the Gordon Highlanders: Surgeon-Lieutenant G. Williamson, M.B., from the 1st Aberdeenshire Volunteer Artillery, to be Surgeon-Lieutenant.

Brigade-Surgeon-Lieutenant-Colonel Smyth, I.M.S., succeeds Brigade-Surgeon-Lieutenant-Colonel A. B. Seaman as Principal Medical Officer of the Malakand Brigade on the retirement of the latter.

GUY'S HOSPITAL MEDICAL SCHOOL.—The examiners for the open entrance scholarships in Science and Arts have made the following awards: In Science—Myers Coplans (Simon Langton School, Canterbury), scholarship £150; John Ford Northcott (St. John's College, Cambridge), scholarship £60; W. Blandy (Nottingham High School), F. Shufflebotham (Trinity College, Cambridge), F. H. Tully (private study), H. C. Keates (Guy's Hospital), and O. May (King's College, London), certificates. In Arts—W. Tuohy (Bedford Modern School), scholarship £100; A. H. E. Wall (Wellington College, New Zealand), scholarship £50; A. J. Gwatkin (Dental School), scholarship £30; J. B. Stephens (Christ's Hospital), A. H. Lewis (St. Olave's Grammar School), and L. G. Nash (Felsted School), certificates.

Correspondence.

"Audi alteram partem."

"THE REGISTRAR-GENERAL AND DEATH CERTIFICATES."

To the Editors of THE LANCET.

SIRS,—Will you oblige me with space for a brief reply to Dr. H. Cyril Goodman's letter, under the above heading, which appeared in THE LANCET of Sept. 26th? Permit me to assure Dr. Goodman that no error whatever has been committed in this office with respect to the matter in question. Your correspondent, in common with other registered medical practitioners, has, doubtless, received a copy of the last edition of the *Nomenclature of Diseases*, recently published by the Royal College of Physicians of London. If Dr. Goodman will refer to the note on page 335 and also to page 343 of that book he will see that in the opinion of the College non-malignant as well as malignant growths are unavoidably associated under the head "sarcoma." My object in asking the assistance of my medical brethren in these circumstances is to determine what proportion of the fatal cases of sarcoma are, in the judgment of the medical attendants, non-malignant in their nature. The information when obtained will be published in abstract in the reports of the Registrar-General.—I am, Sirs, yours truly,

JOHN TATHAM.

General Register Office, Somerset House, Sept. 28th, 1896.

To the Editors of THE LANCET.

SIRS,—I have read Dr. Goodman's letter in THE LANCET of Sept. 26th with interest, as I also have been favoured with a notice from the General Register Office similar to the one received by him. I am asked "whether a sarcoma of the hip-bone, whose duration was one year and which caused death by exhaustion," was of a malignant nature. With this I also received another notice asking "what was the cause of the septicæmia" in the case of a patient whose death was certified as being due primarily to ulcerative endocarditis secondarily to septicæmia. This second example is sufficiently absurd and does not seem to admit of much explanation. Some reason for the anxiety of the Registrar-General's office for information about the malignancy of sarcoma may be found in the small print at the top of page 335 of the Official Nomenclature of Diseases issued by the Royal College of Physicians of London. We find it here stated that "in certain cases malignant and non-malignant growths are unavoidably associated under one head, as, for instance, under sarcoma." We are later given a classification of true cancer or carcinoma, which is apparently the only kind of tumour all of whose varieties are recognised as being malignant. We are unfortunately not given the points of differential diagnosis between the malignant and non-malignant forms of sarcoma in this valuable work, nor, indeed, is it included in its scope; nor are we told to whom we are indebted for this somewhat remarkable classification, as Mr. Hulke and Mr. Marcus Beck, who were originally appointed for this part of the work, died before its completion. Perhaps Dr. Payne, who edited it, may be able to enlighten us as to what is meant by a non-malignant sarcoma. That the officials of the Registrar-General's office are guided in these matters by the official nomenclature of the Royal College of Physicians of London is, I believe, a fact, and we may thus explain their notice to Dr. Goodman and myself and perhaps to others. But even with this learned authority before us we may be permitted some degree of surprise at a request for information about the malignancy of a sarcoma which killed the unfortunate patient by exhaustion in one year from the time of onset. I may say that neither of my cases occurred in the institution with which I am now connected. In each case there was a complete post-mortem examination. I am, Sirs, yours truly,

ARTHUR T. WHITE, M.R.C.S. Eng., L.R.C.P. Lond.

Claybury Asylum, Essex, Sept. 26th, 1896.

"BACTERIOLOGY AND THE MEDICAL CURRICULUM."

To the Editors of THE LANCET.

SIRS,—You have done good service in calling the attention of the profession to the extreme desirability of making a course of instruction in bacteriology a necessary item in the education of the medical student. The practical value of such knowledge in its relation to modern surgery, and the intimate connexion which exists between the science of bacteriology and a rational hygiene, are beyond question, and have, moreover, been convincingly stated, both in your recent leading article on this subject and since by several of your correspondents. Perhaps in no branch of medical work is the value of a practical acquaintance with the technique of bacteriology more apparent than in the routine practice of a large fever hospital. Not only is such knowledge often of great assistance in the diagnosis and treatment of various forms of throat illness, but in many instances the allocation of a doubtful case is determined solely by the result of a bacteriological examination.

It is, at times, of undoubted importance to the inmates of an institution for infectious diseases that the medical officer should have had special experience in the work. The value of this experience is rapidly becoming recognised by the various committees to whom is relegated the management of the fever hospitals, and in filling up a vacancy on the staff of medical officers in the fever service (of whom there are about fifty in London alone) I have known the election to have ultimately turned upon the possession of this important qualification. This is only as it should be, and, for my part, I fully sympathise with Dr. Washbourn in his desire to see the preliminaries settled without delay which shall ensure that every student shall have received practical instruction in bacteriology before he is turned out to practise his profession. I am, Sirs, yours faithfully,

F. FOORD CAIGER.

South-Western Fever Hospital, Stockwell, Sept. 29th, 1896.

"ST. ANDREWS UNIVERSITY MEDICAL SCHOOL."

To the Editors of THE LANCET.

SIRS,—With reference to the letters under the above heading, from Dr. Buist of Dundee, and Dr. J. B. Pettigrew, which appeared in THE LANCET of Sept. 12th and 19th, I beg to state that I presume Dr. Buist is well aware that under the 1862 ordinances St. Andrews University is authorised to give *one complete annus medicus*. It may be that under these 1862 ordinances the recently instituted lectures on Anatomy and Materia Medica may not qualify for graduation. But this is doubtful, has yet to be determined, and cannot be settled by the mere *ipse dixit* of any such self-constituted judges as Dr. Buist. This is also of the less importance, as it is not necessary that either of those subjects should be taken during the first year, and long before the termination of the first *annus medicus* medical education at St. Andrews will be placed upon an entirely satisfactory basis. Intending students need have no hesitation in joining the medical classes at St. Andrews University; their interests will be well cared for and safeguarded.—I am, Sirs, yours obediently,

GEORGE W. BALFOUR,

Member of the University Court of St. Andrews.

Edinburgh, Sept. 28th, 1896.

"INQUESTS AND POST-MORTEM EXAMINATIONS."

To the Editors of THE LANCET.

SIRS,—*Re* "Inquests and Post-mortem Examinations," "Police Surgeon" would be wise to refuse to give any information as to the result of his examination until he is in the witness-box. On the printed subpœna I get it says, "and make a post-mortem examination of the body, with an analysis, and report thereon *at the said* inquest." No coroner can demand any information unless you are in the witness-box and have been "sworn."

I am, Sirs, yours truly,

West Bromwich, Sept. 25th, 1896. A. PAGET STEAVENSON.

To the Editors of THE LANCET.

SIRS,—I read with much interest the letter of "A Police Surgeon" in THE LANCET of Sept. 26th, and it gives me an opportunity of bringing to your notice the too frequent unfair, if not illegal, treatment of house surgeons concerned in coroners' inquests and asking the opinion of your readers on the subject. As everyone knows, resident medical officers

in hospitals do not receive any fee for attending an inquest on anyone who dies in such institution, and in these cases it is the common practice to allow the porter to attend and give evidence as to the cause of death, although I doubt very much if the proceeding is strictly legal. The case is different when a person is brought to a hospital and is found to be already dead; then the house surgeon is, or should be, treated like a general practitioner and paid a guinea for attendance and a guinea for a post-mortem examination, if such is ordered by the coroner. I am a house surgeon in a large general hospital in one of the three largest cities of our empire, and within the past six weeks we have had three persons brought to the hospital by the police, and each was found to be dead on arrival. In each case the body remained in our mortuary until after the inquest, and in each case after the coroner or his officers had made their inquiries we were informed that "as there was no mystery or suspicion of foul play no house surgeons need attend, but the porter was to be present at the inquest and give the cause of death." On the day of the inquest the porter asks one of the house surgeons the cause of death, jots it down on a piece of paper, and does not even get the signature of a qualified practitioner who has a knowledge of the cause of death. By Section 1, Part I., of the Coroners Act, 1887, and by the "Form of Inquisition," the jury are bound by oath to find the cause of death "according to the evidence." Section 4, Part I., of the same Act is as follows: "The coroner and jury shall, at the first sitting of the inquest, view the body, and the coroner shall examine *on oath* touching the death all persons who tender their evidence respecting the facts and all persons having knowledge of the facts whom he thinks it expedient to examine." Now the porter can have no (legal) knowledge of the cause of death; his evidence is at the best but "hearsay," which is *no* evidence. The medical man is the only one legally qualified to give the cause of death, and it appears to me that by the above section of the Act he must be examined *on oath*. The same section, I think, answers the questions of "A Police Surgeon," and shows that the coroner was overstepping his authority in receiving as evidence a written statement and that not made on oath. I take it that were a dead body received by an outside practitioner the coroner would not and could not have that medical man's footman at the court to give the cause of death. Why, then, should an exception be made in the case of the hard-working and not overpaid body of house surgeons? I sincerely hope that some of your medico-legal readers will give their opinions on the case. I must apologise for taking up so much of your valuable space, but this is a subject upon which there is a strong feeling amongst hospital residents, and if you can help in stirring it up it may be the means of getting some curb placed upon the almost autocratic power of coroners over medical men, which it does not appear is allowed them by law, and perhaps some improvement in the whole system of inquisition proceedings.

I am, Sirs, yours truly,

Sept. 28th, 1896. RESIDENT.

"THE GENERAL MEDICAL COUNCIL: CRITICS AND CANDIDATES."

To the Editors of THE LANCET.

SIRS,—The discussion concerning the alleged shortcomings of the General Medical Council, which you were good enough to allow me to commence some weeks ago, has now reached a stage, and has been continued in a manner, which alike suggest to me that it had better be brought to a conclusion. I should allow Mr. Victor Horsley's last letter (I am given to understand that he is no longer "Professor") to pass unnoticed, but for the consideration that, if I did so, he might succeed in persuading himself, and might perhaps try to persuade others, that no effective answer was possible. I therefore apply myself to the task of exhibiting his statements in their true light; and, for the sake of clearness, I will number them as I proceed.

Mr. Horsley says, (1) that I "grossly insulted" the whole body of general practitioners; (2) that, by my own admission, I "deliberately misrepresented" the Medical Acts; (3) that I "encouraged quackery"; (4) that I so far misrepresented my opponents' statements at Carlisle as practically (whatever that may mean) to have committed literary forgery; and (5) that I "opposed constitutional reform."

With regard to (1), when Mr. Horsley in a former letter falsely charged me with having "insulted" my professional brethren, I temperately pointed out that the charge was groundless, and called upon him either to substantiate or to withdraw it. I did not, as he says, "violently demand" that he should do one or the other, for, in my ignorance of his peculiarities, I lapsed into the futility of appealing to him as "a man of honour." The appeal was, of course, as fruitless as it would be to draw a cheque upon a bank which has closed its doors, and what Mr. Horsley did was to write a shambling half column,[1] in which, while utterly unable to meet my challenge that he should cite a single word or phrase which, read in connexion with its context, was insulting to anybody, he tried to escape from his dilemma by converting his charge into a general one, and by saying that my "whole paragraph" "*appeared to him*" to be insulting, and that he "failed to see" how it could be shown to be "other than discourteous." I can understand that Mr. Horsley may "fail to see" what is obvious to ordinary intelligences, but surely I have no responsibility for his "failures," and it is morally wrong of him to say that my paragraph "was" insulting when the truth was only that he "thought" it so. He now writes[2] that in reply to my challenge he "gave me chapter and verse," which is precisely what he did not do, and what he could not do without showing the absurdity of his own allegation. Furthermore, in continuation of the same subject he says that in the opening of my first letter I "compared" practitioners to "suspected criminals." He knows perfectly well that I neither instituted nor suggested such comparison. I pointed out the unquestionable fact that the only practitioners who come "*under the jurisdiction*" of the Council are either accused or convicted persons, and hence I argued that this jurisdiction does not constitute a claim for the "direct representation" of those who are neither accused nor convicted. The argument may be sound or not, but it does not contain any comparison of anything or anybody to any other thing or any other body, and it cannot, by any amount either of stupidity or of misconstruction, be made to bear the meaning which Mr. Horsley has endeavoured to attach to it.

Charge No. 2 is somewhat puzzling. It is absolutely untrue to say that I have "admitted" the offence of having "misrepresented" the Medical Acts; for I have no idea how such an offence could be committed, and certainly have not pleaded guilty to it. I wonder whether "Acts" would feel "misrepresentation" acutely, and whether they would have any remedy, perhaps in suing by Mr. Horsley as their next friend, if they were to take the case into a court of law? I can imagine the possibility of misrepresenting the language of the Acts, or their intention, or their effect; and, indeed, I have seen many examples of such misrepresentation lately. Possibly something of this kind is what Mr. Horsley means, and his obscurity may only be due to his not knowing how to express himself. If this be so, I deny the truth of the accusation. To the best of my knowledge and belief I have never misrepresented the language or the effects of the Acts in any way, and I have nowhere made any admission of having done so. I am not "my own lawyer," and hence it is quite probable that I may understand the Acts better than Mr. Horsley himself.

Charge No. 3, that of having "supported quackery," does not seem to require refutation. I have not mentioned quackery, except to refer to the attitude of the Legislature with regard to it.

Charge No. 4, that by misrepresenting the statements made at Carlisle I have "*practically* committed *literary* forgery," might perhaps be rendered clearer than it is. I do not understand the force either of the adverb or of the adjective. "Practical" implies, I suppose, a distinction from "theoretical" forgery; and I presume that, if so, the former must be actual and accomplished, while the latter is only in contemplation. Then "literary"? What would a "non-literary" forgery resemble? Would it be a forgery not yet written down, but resembling the "theoretical" one in being nascent, inchoate, fully existent only in the mind of the intending forger? These questions are important, because forgery is a serious offence either to commit or to be charged with, a far more serious offence, in my judgment, even than "misrepresenting" an Act of Parliament, and I have a not unnatural curiosity to know whether I am a "forger" or

[1] THE LANCET, Aug. 29th, 1896.
[2] THE LANCET, Sept. 26th, 1896.

not. I think not, if "misrepresentation" of the Carlisle papers be taken as a test. When I only knew of these papers through the imperfect medium of a condensed report I described them collectively as "balderdash." I have since read them singly, and I do not think it possible for any description to be more entirely accurate. I cannot imagine more utter balderdash, unless it be supplied by the charge which Mr. Horsley has based upon my treatment of them.

Charge No. 5 deals with matters of opinion. A proposed change which Mr. Horsley would regard as a "reform" might appear to me to be a retrogression, and if so, it would be both my right and my duty to oppose it. "Reform" and "constitutional" are, in fact, words without meaning; but Mr. Horsley's use of them shows that his mind has never soared beyond the old definitions of "orthodoxy" and "heterodoxy," as "my-doxy" and "your-doxy." He falls into the very juvenile error of advancing his extremely questionable opinions as if they were statements of fact, forgetting that, with regard to each and all of them, he will find hundreds of people with powers of judgment far better than his own, with wider experience of affairs, and of higher and more finished culture, who will differ from him by the whole sky on the many subjects concerning which he endeavours to fancy himself infallible.

Life is not long enough to follow Mr. Horsley through all the windings of his letter, but I observe a reference to my mention of Allinson's case, in which my critic falls into the absurd mistake of confounding Allinson's original appeal against the sentence of the Council, of which alone I was speaking, with the proceedings which were taken against him on a subsequent occasion. The mistake by itself is of small importance (for what is one among so many?), but it may serve as an additional illustration of Mr. Horsley's general inaccuracy. His attempt to conceal another blunder by representing that to utter a caution is to "censure severely" merely establishes conclusively what his earlier letters led me to suspect—namely, that he does not understand the meanings of the many common words which he systematically misapplies. I should greatly like to know whether some of his misapplications do not amount to the "practical commission of a literary forgery."

Passing over some other matter of no particular importance I come to a paragraph in which it is said that I "denied the existence" of Section 40 of the Medical Act. I have referred to my letter, and need hardly say that it contains no such denial. Mr. Horsley quotes my statement that "I mentioned in a previous letter the reasons why a few prosecutions had lately been undertaken," and proceeds to say, "Of course Mr. Carter did nothing of the kind." Referring to that previous letter[2] I find it stated that "the Council has lately thought fit to take proceedings under Clause 40 in one or two instances, *mainly, I think, in order that the familiarity of its legal advisers with the questions at issue might assist in obtaining convictions at the hands of unwilling magistrates, and so might lead to the establishment of precedents.*" Surely this was to "mention reasons"? If it be necessary to say more, the facts are that Clause 40 was constantly discussed during the earlier years of the existence of the Council, and that Mr. Ouvry, the then solicitor, a very skilful and accomplished lawyer, strongly advised that no action under the clause should be taken by the Council. He foresaw many difficulties in the way of obtaining convictions, and he believed that failures would cast discredit on the prosecuting body. The Medical Defence Union has had experience of the predicted failures, as in the Cardiff case, the Chelsea case, the case of the so-called "aurist" at Leeds, and probably in others, but does not mind the discredit, although it now calls for an amendment of the clause. That subject also has often been discussed in the Council, but no workable form of amendment has ever been suggested, while it has been pretty clearly ascertained that any attempt to move Parliament in the matter would either fail, or, still more probably, would result in giving increased freedom to quacks. The Council recently saw its way to obtain convictions, and determined to make the most of the opportunity.

And now only one word more. The farrago of rubbish and falsehood, the meanness and malignancy of which I have, I think, sufficiently exposed, is connected together by coarse personalities and vulgar abuse, such as are no longer tolerated in any decent society. I do not think it would be consistent either with my own dignity or with my professional position to continue a controversy which my opponent conducts in such a manner.

I have the honour to be, Sirs, your obedient servant,

Harley-street, Sept. 20th. R. BRUDENELL CARTER.

[2] THE LANCET, Aug. 22nd, 1896.

To the Editors of THE LANCET.

SIRS,—I must again draw Mr. Brudenell Carter's attention to the fact that the question which is now being discussed relates to the manner in which the General Medical Council performs the duties imposed upon it by the Act of 1858 and that a discussion of my merits or demerits is not germane to the matter and cannot possibly interest the readers of THE LANCET. Turning now to the only points in his confused and lengthy letter which deal with the doings of the Council, it is satisfactory to obtain at last an admission from a member of the Council that it has absolute power under the Act to decide what constitutes infamous conduct and to punish offenders under Section 29. It is true that if this power were grossly abused the decisions of the Council could be set aside in the law courts, but this contingency need not be feared if the Council confines its legislation to genuinely intra-professional matters. It is now my painful duty to expose a serious misstatement on the part of Mr. Carter with reference to the case of Allinson *v.* the General Medical Council. Mr. Carter writes as follows: "I was in court when judgment was given in Allinson's appeal against the Council. Allinson contended that his name had been removed for advertising and asked to have it restored. Mr. Justice Henn Collins clearly intimated that advertising alone would not have justified the removal; but he decided against the appeal because the character of the advertisements was such as to afford reasonable ground for maintaining that they were infamous."

So far Mr. Carter's version. The real facts are as follows. This action was tried on June 26th, 1893. "The plaintiff asked for a mandamus commanding the General Medical Council to restore his name to the Register, they having, as he alleged, wrongfully removed it on May 28th, 1892, upon the ground that he had been guilty of infamous conduct in a professional respect. Two objections were taken: first, that the court that investigated his case was improperly constituted in that one member who sat was also a member of the Medical Defence Union, who were in the position of accusers; in the second place, it was said that the defendants really erased the name of the plaintiff because of his having adopted and advocated a theory in medicine or surgery as to vaccination that was not in accordance with the professional view."[1] Mr. Justice Collins dismissed the appeal with costs. Allinson appealed against this decision, and his case was re-heard on Feb. 23rd, 1894, before Lord Esher, Master of the Rolls, Lord Justice Lopes, and Lord Justice Davey, who dismissed his appeal. The case is important inasmuch as Lord Esher, with the concurrence of the two other judges, when giving his decision, defined the meaning of the term "infamous conduct." The case is fully reported in the Law Reports (Q. B. Division), Vol. I., 1894, p. 750, from which I take the following extract from Lord Esher's judgment: "I adopt the definition which my brother Lopes has drawn up of, at any rate, one kind of conduct amounting to 'infamous conduct in a professional respect'—viz.: 'If it be shown that a medical man in the pursuit of his profession has done something with regard to it which would be reasonably regarded as disgraceful or dishonourable by his professional brethren of good repute and competency,' then it is open to the General Medical Council to say that he has been guilty of infamous conduct in a professional respect. The question is not merely whether what a medical man has done would be an infamous thing for *anyone else* to do, but whether it is infamous for *a medical man* to do. An act done by a medical man may be infamous, though the same act done by anyone else would not be infamous; but, on the other hand, an act which is not done 'in a professional respect' does not come within this section. There may be some acts which, although they would not be infamous in any other person, yet if they are done by a medical man in relation to his profession, that is with regard either to his patients or to his professional brethren, may be fairly considered 'infamous conduct in a

[1] Report of case in Brit. Med. Jour., 1893, vol. ii., p. 42.

professional respect,' and such acts would, I think, come under Section 29."

It is impossible to reconcile the definition of infamous conduct which has been drawn up by Lord Esher and Lord Justice Lopes with the rule alleged by Mr. Carter to have been laid down "by the judges," that "the right of the Council to decide whether certain courses of conduct were infamous or not" must be admitted, "but only subject to the prior condition that the conduct must be such as to raise a reasonable presumption of possible infamy in the mind of an ordinary person." Your readers will judge from this example how much reliance may be placed upon Mr. Carter's other assertions concerning the legal aspect of the questions he deals with. Respecting medical aid societies, Mr. Carter omits to mention that an exhaustive inquiry was held by a committee of the Council upon the conduct of such associations. Their conclusions were drawn up in an elaborate report, which was presented to the Council on May 26th, 1893, and in the report this committee advised the Council to take action in the matter. It was not, as Mr. Carter suggests, a question of protecting the pecuniary interests of medical practitioners, but of safeguarding the public from the evils which must result from the disgraceful system of farming disclosed. The Council refused to take any action. Mr. Carter characteristically mis-states the case and asserts that no charge has been made against any individual servant to the effect that he undertakes more professional work than he can carry out in a proper manner. The Committee of the Council reported on this point as follows: "(1) The excessive number of patients to be attended in the case of many of the associations causes great exhaustion and disheartenment in the medical officer; (2) where there are so many patients it is impossible for them all to obtain adequate treatment from an overworked medical man."

Mr. Carter, in his letter of the 1st ult., denied the existence of Sections 40 and 43, &c., of the Medical Act of 1858, in the following words: "The Medical Acts not only contain *no* powers for the suppression of unqualified practice, but they even expressly recognise it." In his letter in THE LANCET of Sept. 19th he says: "Although there is no duty to prosecute there is the power to do so; and the question whether or when this power should be exercised is entirely one of expediency." He gravely brings forward as evidence the report of a committee of the Council, which as early as 1859 determined that it would not be a prosecuting body, in which it was stated that "it is no part of the functions of the Council under the Act to institute prosecutions at large for offences against the Act." It would have been a matter for surprise had the committee of such a Council reported otherwise. That this report was in distinct contravention of the Act is proved by the fact that the Council itself, in December, 1895, passed a resolution directing its Penal Committee to inquire into cases of persons offending under Section 40, and when it sees fit to instruct the legal advisers to proceed against such persons, and also by the fact that the Council has appeared as a prosecutor before now under the prosecuting sections of the Medical Act of 1858. Mr. Carter states that the Council called the attention of the Obstetrical Society to the fact that the terms of their certificate might be misconstrued, and proceeds as follows: "The idea of charging a number of eminent gentlemen with 'infamous conduct' on account of what was at the worst an error of judgment could only be entertained by a person whose perceptions of the ludicrous were congenitally deficient." This charge is, however, precisely the one that the Council made and for which Mr. Carter is in part responsible, since on Dec. 3rd, 1894, the Council passed two resolutions, the first condemning the issue of colourable imitations of legal diplomas by registered practitioners as conduct infamous in a professional respect; and the second stating that the certificate of the Obstetrical Society came within the purview of the foregoing resolution. It was too much to expect of the Council that it could maintain a courageous attitude for any length of time, and accordingly we find that on May 29th, 1895, the Council passed the modified certificate of the Obstetrical Society in a form which, to say the least, was highly objectionable.

It is difficult to agree with Mr. Carter when he contends that the Report of the Council on Professional Education (1869), which advocated the establishment of a single Conjoint Examining Board for each division of the kingdom, was a serious attempt to establish the one-portal system of medical examination. Granting this, however, the inaction of the Council in the matter is startling. The proposed scheme fell through owing to the refusal of one of the licensing bodies to join. It was open to the Council to make representations either to the Privy Council or to Parliament as to the desirability of such reform, but I believe that I am correct in stating that the Council has taken no further action, although twenty-seven years have elapsed since the report was published. I may here correct another misstatement of Mr. Carter, who says that it is inaccurate to state that power is given under the Act to the Council to compel all examining bodies to bring their examinations up to a standard which shall be considered to be satisfactory by the Council. By Section 20 of the Medical Act it is lawful for the Council to represent defects in the course of study and examinations required by any qualifying body to the Privy Council. By Section 21 it is lawful for the Privy Council, upon any such representation as aforesaid, to suspend the right of registration in respect of qualifications granted by the qualifying body in default until the General Medical Council represents to the Privy Council that such qualifying body has made effectual provision, *to the satisfaction of the General Medical Council*, for the improvement of such course of study or examinations. Mr. Carter states that the repeated refusals on the part of the Council to increase the number of direct representatives was a decision arrived at after full consideration of the circumstances. In my last letter I gave an abstract of the manner in which these discussions were conducted. If Mr. Carter considers that derision is synonymous with argument I agree that the fullest consideration was given to the subject.

Mr. Carter asserts that the "outcry against the Medical Council is nothing more than an attempt to introduce into the medical profession the accepted methods of common trades unionism," and illustrates his statement by informing his readers that those who are anxious to see the General Medical Council reformed are also anxious to punish evil-doers who are on the Register. It is a matter for regret that a gentleman who presumes to legislate for the medical profession should be so ignorant of contemporary affairs and should fail to understand the principle of such a potent factor in industrial questions as trades unionism. The following extract from the rules of the Amalgamated Society of Engineers will give a fair idea of the general objects of a trades union:—

"The society shall be a trade society and the objects for which it is established are: By the provision and distribution of funds, and by the other means hereafter mentioned, on the conditions set forth in these rules, to regulate the conditions of labour in the trades included in the society and the relation of its members with them; to promote the general and material welfare of its members; to assist them when out of work and in distressed circumstances; to support them in case of sickness, accident, superannuation, and loss of tools by fire; to provide for their burial and the burial of their wives; and to aid other trade societies having for their objects or one of them the promotion of the interests of workmen."

I fail myself to see any analogy between these objects and those which we have in view. The principle of trades unionism is organisation of workers for the purpose of obtaining advantages at the expense of the public. A trade union does not concern itself with the ethics of the trade that it represents or with the morals of its members. It does not take into consideration the interests of the public. Those who desire to see a reform of the Council believe that the interests of the public are identical with those of the medical profession, and are anxious to suppress miscondnct among members of our profession. The Medical Defence Union so little resembles a trade union that it prosecutes every session members of the medical profession who set their selfish ends before the common weal. The General Medical Council, which was established in the interests of the public and of the medical profession, neglects its duties in these respects, and has degenerated into a union for the safeguarding of the interests of corporative bodies. It is this ring that we are endeavouring, and I think I may say not without some success, to break down. Mr. Carter alludes to the origin of the funds of the General Medical Council. We contend, and the President of the Council supports us in our contention, that these funds come out of the pockets of the medical profession. In a former letter Mr. Carter stated that the tax was paid by the students' parents and therefore could not be said to have been paid by the medical profession. I said in my last letter that this is a childish plea, but as Mr. Carter objects to my use of this adjective I am willing to substitute for it the word senile. To-day he shifts his ground and tells us that when

the Medical Act (1858) was under consideration it was proposed to place a five-guinea Government stamp upon a first qualification, and if this had been done it would have gone to swell the Inland Revenue returns. This is a fact which is fairly obvious, but it is difficult to appreciate its bearing upon the point at issue.

Mr. Brudenell Carter, having failed to answer satisfactorily the questions raised by Professor Victor Horsley and myself, attempts, like the sepia, to cover his retreat by squirting ink at his opponents. Black though the cloud may be that he has raised about him, it is not difficult to detect and frustrate his manœuvre. The practical lesson to be learnt from Mr. Carter and his defence is that there exists urgent need for an increase of direct representation upon the Council.

I am, Sirs, yours faithfully,

Dover, Sept. 19th, 1896. A. G. WELSFORD.

*** This correspondence must now cease. We cannot but regret that many of the letters have contained expressions of such a bitterly personal nature. Neither the cause of medical reform nor the elucidation of the Medical Acts is furthered by accusations of mendacity and other crimes. Certain gentlemen whose letters have not been published are requested to understand that they have entirely transgressed the bounds of what we consider to be decent criticism. Other letters have been crowded out.—ED. L.

THE MEDICAL DEFENCE UNION, LIMITED, AND THE LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY, LIMITED.

To the Editors of THE LANCET.

SIRS,—It has already happened to me on two occasions in your columns to point out remarkable inaccuracies in statements made by Professor Horsley. Another example of this deplorable defect in dealing with matters of fact is recorded on page 908 of THE LANCET of Sept. 26th. Professor Horsley there says: "Mr. Carter has a good word for the lawyers of the General Council, but on this as on many other questions the profession has only obtained benefit through the efforts of the Defence Union in correcting mistaken interpretations of the Medical Act." The Medical Protection Society has done useful work "in correcting mistaken interpretations of the Medical Act." For example, the society did this in their well-known and oft-quoted prosecution of the "Indian Oculists." The records of the work of the Protection Society show that it also, and not the Defence Union alone, has had to do with correcting mistaken interpretations of the Medical Act. And so for the third time in your columns Professor Horsley, the President of the Defence Union, is inaccurate in his statement of important matters which are common knowledge among men who take an active part in the business of medical defence and know its recent history.

I am, Sirs, yours sincerely,

G. A. HERON, Treasurer,

Sept. 27th, 1896. London and Counties Medical Protection Society.

THE CASE OF LEPROSY AT UPWEY: A CORRECTION.

To the Editors of THE LANCET.

SIRS,—May I beg you to correct a mis-statement in THE LANCET of Sept. 26th that "the medical officer of health of Weymouth had stated at a meeting of guardians of that town that he had discovered a case of leprosy in a boy at Upwey"? Upwey is not in Weymouth urban district nor are there any guardians for the town of Weymouth. The discovery, which I have since confirmed from experience acquired at Singapore, of a case of "leonine leprosy" at Upwey was made by one of my rural colleagues, not by myself, and great annoyance is felt here by the urban public that their town, with the best record of health in Dorset during the year, should be unjustly stigmatised as the seat of a "pestilent disease."

I am, Sirs, yours faithfully,

B. BROWNING, M.D., D.P.H.Edin., &c.,
Medical Officer of Health for the Borough of Weymouth and Melcombe Regis.

Weymouth, Sept. 27th, 1896.

THE ACTION OF THE "X" RAYS.

To the Editors of THE LANCET.

SIRS,—In his presidential address at Liverpool Sir Joseph Lister pointed out that the action of the "x" rays, apart from the fluorescent screens or photography, might be of use in medicine, and he cited recorded actions upon the tissues. It is quite evident from recent investigations that the actions upon the tissues, as also upon fluorescent substances, will require further observation and explanation. At first we were inclined to think, owing to the ease with which they penetrated substances, that their action was comparatively simple, but apparently it is not so. As far as dermatitis is concerned, of which we have heard a good deal lately, I should like to record my own experience. I have seen nothing during my experiments of loss of skin and hair recorded by some observers. Further, although I have photographed a considerable number of patients, and the tissues of my own body must have been very much subjected to the action of the rays, I could not say that I had observed much of a definite nature. Some patients stated that they felt a "tingling" or "pricking" of the skin of the hands or lower extremities when subjected to the rays in photography. In a few instances, and these in patients who were not likely to know much about the subject, and consequently less likely to imagine effects, an ill-defined reference to some such sensation on the skin was made.

About six weeks ago, however, I had been making a special series of experiments with a view to obtaining greater steadiness and uniformity of luminescence on the screen. This necessitated the placing of my left hand in front of the focus tube to study the images of the bones of the hand in different conditions of the tube, and for five nights in succession the left hand was subjected for long periods to the action of the rays. On the third day a distinct difference was noticed in the appearance of the skin, and before the experiments had been concluded I had a well-marked dermatitis of the left hand, the effects of which lasted for a fortnight afterwards. The skin looked very much as if it had been strongly sunburned. This is the only definite fact which I have observed during a large number of experiments made upon myself and others.

Another observation of considerable interest, however, was made during some of my photography with the earlier apparatus. In photographing a fish by means of the old form of German tube and using an induction coil and Tesla apparatus I was much surprised to find that the surface of the fish, which had been quite dark at the beginning of the experiment, was altered considerably during the exposure. As I have explained, this was done by the older form of apparatus and required a longer exposure than now. When the lights were turned out in the room it was found that the back of the fish was covered with phosphorescent patches, which did not disappear completely for some hours afterwards. I have since made a number of observations on the skins of fish in moist and dry conditions, but only in this particular instance was the phenomenon well observed. Another curious example of the action of these rays was afforded me by the study of fluorescent screens. For reasons which need not be entered upon here I had been experimenting with a view to getting the fluorescent screen into a particular condition for a period of time. I hung over the back of the screen, between it and the tube, a metal ring. The tube was working exceedingly well and the screen was very brilliantly illumined. After a quarter of an hour's exposure the ring was removed and the fluorescent screen set aside in a place where it was not exposed to daylight. My own impression previously to this had been that the action of the rays on the potassium or barium-platinocyanide salt was very transient; in other words, that the moment the current was turned off all effects had disappeared. To my surprise, however, the following evening, when the screen was taken out and made luminescent, I saw a distinct ring on the screen corresponding to the metal ring which had been hanging on it the previous night. One could distinctly see on the inside and outside of the ring a bluish colour differing from that on the part of the screen where the metal ring had protected the salt from the action of the rays. The screen was immediately put past and I examined it for four nights in succession; each time, although less distinct than previously, I could see the image of the ring. It did not

completely disappear for nearly a week, but during this time the screen was kept in the dark. The experiment has since been repeated with different metallic objects, such as forceps, &c., with the same result. It is clear from such observations as the above that whether the changes be physical or chemical the effects of the "x" rays may not be as transient as had been previously imagined. I think it right here to mention, however, that in making the statement that such things are the result of "x" rays it should be remembered that we have two other forces present which might also act upon the tissues—viz., heat and electricity. It is true the former is least likely of the three to be the cause, but one can never forget that the skin of the hand is subjected to strong electrical currents, particularly when the vacuum changes and the sparks tend to go over the tube.

I am, Sirs, yours faithfully,

JOHN MACINTYRE, M.B., C.M. Glasg., F.R.S.EDIN.

Sept. 30th, 1896.

"THE PRACTITIONERS' M.D."

To the Editors of THE LANCET.

SIRS,—If there exists a desire to oppose the St. Andrews New Ordinance to be presented to the Queen, I think the best course would be for three or more gentlemen, resident in London, who hold the M.D. St. Andrews (practitioners' degree) to form a committee. An appeal might then be made through your columns for the support of general practitioners anxious to keep at least one door open whereby they may obtain a *registrable British degree*. They might then present a petition to the Queen through the Home Secretary. I am, Sirs, yours truly,

A PRACTITIONER BUT STILL A STUDENT.

Sept. 29th, 1896.

SANITARY REFORM AT PLYMOUTH.

(BY A SPECIAL CORRESPONDENT.)

DURING the reign of Edward III. Plymouth was the fourth most important town in England. Bristol, Hull, and London alone had a larger population. In Elizabeth's reign Plymouth was the most important naval station, and it was here that the British fleet was held in readiness to meet and give battle to the Spanish Armada. But from that time henceforth and up to the beginning of this century Plymouth seems to have remained stationary. Indeed, during the Napoleonic wars the population of Devonport was slightly in excess of that of Plymouth. This, of course, was due to the vast naval constructions necessitated by the war. Now, however, the town of Plymouth is increasing with leaps and bounds. Unfortunately the local authorities for many years adopted a cheese-paring policy and public works were not at all in keeping with the growing prosperity of Plymouth. The medical officer of health was not only allowed to engage in private practice, but was paid so small a salary that he could not devote much time to public health questions. Of late, however, the town has awakened to a better conception of its higher interests, and now an enterprising and reforming policy is actively pursued. The services of Mr. F. M. Williams, D.P.H., were secured some five years ago as medical officer of health for the borough and port, and this on conditions and at a salary that precluded his engaging in private practice. Mr. Williams had hardly assumed the reins of office when he denounced the dangerous manner in which the water-supply was conveyed to the town. This was a matter of all the more importance as it jeopardised, not only the health of the inhabitants of the town, but that of the sailors and marines of numerous ships of war that call in or are stationed at Plymouth, which also depend upon this supply. The water is obtained from the upper reaches of the watershed of the River Meavy on Dartmoor. The gathering ground is seven and a half miles square and from 700 to 1700 feet above the sea level. The land is composed of rock of igneous origin, mostly granitic, and the rainfall ranges from fifty to eighty inches in different parts. A channel—locally called a leat—about seven feet wide and eight miles long conveys the water to the reservoir at Roborough, whence it reaches Plymouth, a further distance of six miles, in iron pipes. The leat is said to have been constructed by Sir Francis Drake, and doubtless in those days the population was so sparse as to cause but little risk of contamination. This water is exceptionally soft, possessing only one and a half degrees of hardness, and is therefore admirably suited for domestic purposes. The quantity for the year 1891, when Mr. Williams first reported on the subject, was equal to 57¾ gallons per head per day. The storage capacity, amounting to only 13,000,000 gallons, was only sufficient for two and a half days. The most urgent matter, however, was the danger of contamination. The open canal passed through fields that were extensively manured. A violent downpour of rain might wash some of the fresh manure from the land into the canal. Then there were the leaking cesspits of Yelverton, the cattle droppings, and human excreta on Roborough Down. Military manœuvres were also held in the neighbourhood of this open water-course, and this increased the risk of pollution. The open channel had a further inconvenience. It was occasionally blocked, either in consequence of mud and stone accumulation during the droughts, when the current was very feeble, or in the winter when blocked up by snow.

The soundness of these criticisms was admitted. By a vote which was practically unanimous the Town Council decided to adopt the project of their water engineer, Mr. Sandiman. This scheme, which subsequently received the sanction of Parliament, proposed to construct at a site called Burrator a storage reservoir with a capacity of 500,000,000 gallons, sufficient to supply a population of 130,000 persons for 130 days, and the present population of Plymouth is only estimated at 91,000. This reservoir is now in course of construction and progressing rapidly, but it will not be possible to give a constant supply to the whole town and to feel safe against the danger of occasional droughts till this work is completed. The danger of contamination is now, however, obviated. Iron pipes, to the length of four and a half miles, were laid from the storage reservoir to Roborough, so that the water is now protected from the danger of fouling from the cesspits or the manure from the fields. Thus the water problem, so important to the health of all towns, is in a fair way to a satisfactory solution at Plymouth.

The same cannot be said with regard to the drainage of the town. Who knows when the sewers were built or where they were built? It was only the other day that a wall of the home or paying hospital gave way. The foundations were not secure because there was a big drain underneath, the existence of which was unknown to the inhabitants. The sewers, with but few exceptions, have been found faulty in construction and in bad repair. Consequently new intercepting sewers have been built and many subsidiary sewers have been dug up and relaid or pipe sewers substituted. How far this patchwork method will prove satisfactory it would be difficult to say. There is, however, one thing very certain, the present multifarious outfalls are altogether opposed to sanitary principles. It is proposed to prolong these outfalls to three and five fathoms of water. But this will not prevent the pollution of the harbour and of the sea front, where many persons indulge in sea-bathing. Evidently a bigger and more general scheme is necessary by which all the sewage can be taken right away from the town and thrown into the sea at some distant promontory. Also the discharge should be continuous. By allowing the sewage to accumulate in the lower reaches of the sewers during flood tide a back pressure of sewer gas must be produced, and yet this is what happens at the western or Millbay outfall. For the eastern outfall a large impounding reservoir was constructed a few years ago. There can be no doubt that the discharging of sewage only at ebb tide and after it has been allowed to accumulate for hours together without any chemical treatment is to be condemned. This method becomes all the more obnoxious when we find that the outfalls are not in the open sea, but in the harbour or in the Sound and close to a thickly populated and much-frequented shore. With respect to house drainage considerable activity has been displayed by the sanitary inspectors in visiting private houses, testing house drains, and insisting on the proper construction of waterclosets, &c. Something like 4000 such improvements, alterations, and repairs were effected in the course of the year 1893. The municipality has also adopted the excellent plan of giving free of charge a sanitary certificate to lodging-house keepers if after due examination the sanitary inspector finds the drains, &c., in good order. Therefore, a visitor renting apartments at Plymouth should make a point of first inquiring whether the house has a sanitary certificate. For the modest fee of 2*s.* 6*d.* the

moke or water test can be applied to any suspected soil-pipe. The householders of Plymouth have, therefore, no excuse or defective domestic drainage, the authorities having done all that is possible to assist them in this respect.

Further, a very severe by-law has been enforced with respect to houses let in lodgings of a rateable value not exceeding £20. This comprises the poorer class of lodgings where the rent does not exceed 2*s.* 6*d.* per week for an unfurnished or 5*s.* for a furnished room. All such lodging-houses have been inspected and the landlords are compelled to observe certain rules. Thus there must be 300 cubic feet of clear space for every person above ten years old in rooms used exclusively for sleeping purposes and 400 cubic feet in rooms not used exclusively for that purpose. The space for children under ten years is fixed at half this amount. The waterclosets of all such houses must have windows opening on the outside of the house and a means of constant ventilation by at least one air-brick built in an external wall of the watercloset or by an air-shaft. There must also be a separate flushing cistern, with no direct connexion with the service pipes. No D-trap is tolerated. Courtyards are to be cleansed at regular intervals. Everything is to be kept clean and in good working order, and the sanitary inspectors have at all times the right of entry to see that this is done and that the entire house is in good order. The floors of the rooms are to be swept every day and washed every week. Cisterns are to be cleansed from time to time. The whole of the premises are to be thoroughly cleaned during the first week of May every year. Courts, &c., are to be constantly lime-washed and the pavement kept in good order and well drained into a trapped gully. The windows of sleeping-rooms must be kept open for at least one hour every morning and afternoon. The penalty for not observing these rules is a fine of £5 and a further fine of 40*s.* for each day of neglect after notice has been served, unless the justices or court may think fit to inflict a smaller penalty. The application of this by-law necessitated the sending out of 4600 duplicate notices in 1891 when the law was first enforced and a register had then to be prepared. During the same year the smoke test was applied to 1072 drains. In 1892 about 2000 cheap lodging-houses were inspected, and sanitary improvements, such as the rebuilding of waterclosets, enforced in 286 cases. This work had to be continued from year to year, and in 1895 no less than 4700 visits of inspection were made and 1800 sanitary improvements effected in this class of house alone. Apart from this special work, but in consequence of cases of infectious disease or of complaints as to sanitary defects, 4350 other houses were visited last year and 1791 sanitary improvements effected. At the same time cowsheds, dairies, milk shops, and bakehouses necessitated 4185 visits.

It would be difficult in a limited space to relate all that has been done during the last five years to remedy the long-neglected sanitary defects of Plymouth. It must suffice to mention briefly some of the principal achievements. For instance, the town possessed no means of disinfecting excepting the burning of sulphur in the rooms of the sick; now there are a steam disinfector and disinfecting station, where 3568 articles were disinfected last year. There was no dead-house; now a morgue, with post-mortem room and coroner's court adjoining, is in course of construction. A new isolation hospital has been built, and there is also a hospital ship afloat for the isolation of small-pox and other infectious diseases. On the other hand, the public baths and washhouses remain in a deplorable condition and should be re-constructed. Nor is there proper provision for the collection and disposal of house refuse. At present this is collected by a private contractor and carted off to surrounding districts, where it is used for manure. But at certain seasons the refuse cannot be placed on the soil and its accumulation causes a nuisance. The municipality is now studying a scheme for the erection of a destructor, but nothing has yet been decided in this respect.

One of the most glaring sanitary defects of Plymouth is the existence of private slaughter-houses in the centre of the town and in crowded thoroughfares. There are eleven slaughter-houses, mostly situated in the immediate vicinity of the market—that is, in the very centre of the town. Two of these houses belong to the corporation and are fairly well organised as a sort of makeshift arrangement; but they are small and in nowise resemble model abattoirs. The other slaughter-houses are not in any sense abattoirs; they are simply coach-houses or stables in which cattle are slaughtered. There are rafters, cross-beams, and pulleys so as to hang the carcasses and cut up the meat. Also more ample ventilation is provided than in a coach-house and cement has been introduced between the pavement stones, but if any of these places were built as slaughter-houses, then they were built by persons who understood absolutely nothing about the technique of the question. Such slaughter-houses should not be allowed anywhere, and still less are they permissible in the centre of a town. Two slaughter-houses which I visited were in a narrow street close to the central market. Under the big coach-house doors, which alone separated the public in the street from the slaughtered animals, ran blood that flowed over the pavement into the street gutter. Naturally the greater part of the blood gravitates towards a gully in the centre of the slaughter-house, but some of it escapes into the street. Another slaughter-house is situated in a main thoroughfare where a tramway starts. On one side is a ready-made clothes shop, on the other a grocer's store-house. These houses touch the slaughter-house, and the bad odours that arise from the slaughtering, cleansing out, and cutting up, of animals have free access to the store of groceries which are within a yard or two of the blood and offal. The street, fortunately, is wide and I found more complaints about bad odours in a very narrow and densely populated street where there is yet another slaughter-house. Here the inhabitants have constantly to shut their windows to keep out the odours and are loud in their complaints. There are bedroom windows within twenty or thirty feet of this slaughter-house, and the back doors of shops which are at times crowded with customers are even nearer. Sometimes the shop assistants have to hastily close these doors to prevent the odours from incommoding their customers. Finally, I must not omit to mention the case of a public-house. A passage about a yard wide leads to a small court at the back, and in this court, the court of the public-house, there is yet another slaughter-house. It is difficult to understand how the cattle can be driven through this narrow passage, and still more difficult to understand how any one could have consented to allow what presumably was the stabling of the public-house to be converted into a slaughter-house. The offal, the dung, and the filthy refuse of the slaughter-house have to be brought along the narrow passage. There is no accounting for taste, but to most persons such proximity of blood and beer can scarcely be considered appetising.

With reprehensible want of forethought the wholesale meat market has been established in the centre of the town, and there is close at hand a very insufficient, cramped, and small cattle market, surrounded by dwellings and other buildings. The butchers are willing enough to close their private slaughter-houses and to take their cattle to a public slaughter-house, but only on condition that the slaughter-house is built on the spot—that is, in the centre of the town and close to the market. Of course, no sanitarian can possibly entertain such a proposal. On the other hand, it is urged that if the public slaughter-house is established outside the town, it will necessitate considerable expense and trouble to bring the meat up to the wholesale market in town. It stands to reason, however, that the cattle market, the public slaughter-house, and the wholesale meat market must be situated side by side, but outside the town, and, if possible, close to a railway line and to a canal or other means of water communication. Such a site could be easily found close to Plymouth. The land actually occupied by the private slaughter-houses and the small central cattle market could be readily and advantageously employed for ordinary building purposes. It would not, however, be so easy to dispose of the present wholesale meat market. This market might, perhaps, be utilised for the sale of frozen meat and such other meat as comes from cattle that have not been slaughtered in Plymouth. In any case the right course to follow is clearly indicated. What should be done is so obvious that it cannot be open to question or discussion. Cattle market, slaughter-house, and wholesale meat market must be established, all three together, outside the town, and the existing cattle market and slaughter-houses abolished. This is not only necessary to preserve the health of the town, but also to ensure the proper supervision of the cattle and the meat. As matters now stand it would be easy to drive a diseased animal to one of the private slaughter-houses, where it could be slaughtered without previous inspection by a skilled veterinary surgeon. The evidence given before the Royal Commission on Tuberculosis shows that cattle, if intended for food, must be absolutely free from tuberculosis. From

every point of view, therefore, it is urgently necessary that the sanitary authority should deal with this matter in a thorough-going spirit. It is absolutely impossible to patch up the existing state of affairs.

(To be continued.)

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Corporation Model Lodging-houses.

THE City Council recently approved of a scheme for building three sets of model lodging-houses—one in the cleared area in Oldham-road, one in Ancoats, and one in Hulme. That in Oldham-road is estimated to cost £47,000 and will accommodate 741 persons. The buildings in Ancoats are to cost £20,000 and to accommodate 328, while that in Hulme is to serve for 278 persons at a cost of £19,500. It seems that there are 268 common lodging-houses in the city under police supervision, with a total of 6550 beds. But although under the eyes of the police they are not all that they should be, and a surprise visit to a number of the houses paid by the Sanitary Committee a few months ago revealing a deplorable state of things, after careful consideration it was decided to provide better accommodation, especially for decent working men who have to live in lodgings. Salford is already possessed of municipal lodging-houses, which have been a great success. About two-thirds of the men live there regularly, the rest being lodgers for a night or so. On Wednesday last the committee, accompanied by the medical officers of health and the city surveyor, paid a visit of inspection to the London County Council's block of model lodging-houses in Drury-lane and to the houses at Vauxhall and King's Cross-road built by the Rowton Houses Company. With the two latter especially the committee was much pleased. These houses are for men only, and it seems that similar provision for women is esteemed so difficult and delicate a matter that Mr. R. E. Farrant, deputy chairman of the Rowton Houses Company, said that though "he had been offered £30,000 without interest if he would provide a house for women the difficulties were so great that he could not see his way at present to undertake the task." The need of some such provision in our towns for single women is, no doubt, great, for though single men are often very helpless and a prey for sharks their sisters are perhaps still more so and exposed to special dangers. This proposal of the Sanitary Committee has, of course, brought forth a host of objectors. Some prefer cottages to the so-called "barracks" or to model lodging-houses, and as to many points with good reason; but the cost is of itself prohibitory, and cottages built with any regard to healthy conditions would not provide for all those displaced from the insanitary and congested areas recently cleared. Others would have these areas left vacant as lungs for the surrounding districts—a most excellent desire. The only plan by which accommodation can be found in the towns for the working classes who, under present conditions, must be near their work is by building great piles such as that in Oldham-road. An article by Mr. S. J. Low, quoted in the *Manchester Guardian*, says: "Philanthropic societies and local authorities busy themselves in impeding the lateral expansion of the towns while trying to heap still higher the contents of the filled and loaded districts where men live in layers one on the top of the other." With the present tendency to crowd into the towns all this will increase more and more. The most promising solution seems to be in the direction of greater cheapness in quick transit, whether by workmen's trains or electric trains, to greater distances from the centres, where land is less costly and cottage rents will be within cottagers' means.

Fatal Sewer Accident.

An inquiry was held last week by the city coroner respecting the death of Charles Jones, who was poisoned by gas while working in a sewer at Harpurhey. Corporation workmen had been engaged for some days in sinking a shaft in order to discover an old sewer and connect it with the main drainage. They had got to a depth of 26 ft. and Jones was working at the bottom, when, "as he became very quiet and no sound could be got from him, an alarm was raised." Patrick Devine, who was at the top, very courageously asked to be lowered down. Just as he reached Jones he called out to be pulled up again, but when drawn up five or six feet he was overcome by the gas and fell down on his mate. Another labourer named Higgins then volunteered, but he, also, was overcome by the gas. Some buckets of water were then thrown down, after which a man named Lewis went down the shaft to the rescue of the three men below and succeeded in sending up Higgins and Devine, Jones being brought up by another man. Higgins was able to go home, but Jones and Devine were taken in a horse ambulance to the infirmary. Jones, however, was dead and Devine was in a dangerous condition. According to the evidence at the inquest, "Jones probed with a rod in the direction of the sewer and an outrush of gas which came from it overpowered him." He has left a widow and family. The verdict was "Accidental death." But this man ought not to have lost his life, nor should the two men who bravely went to his help have had their lives endangered. These sewer-gas accidents are sufficiently numerous, not merely to justify, but to make imperative, some provision in anticipation of their possible occurrence. A diver is able to signal at once to be pulled up to the surface, and this should be the case with a man at the bottom of a shaft in search of a sewer, for he cannot tell the moment when a rush of gas may come. It would very rarely, or perhaps never, happen that he would be so instantaneously overcome as to be unable to pull a rope or use some plan of signalling properly arranged for, and he might at once be drawn up to the surface. It may be said that these accidents are too infrequent to make it worth while to go to this trouble and that the men would not use such a signal. How many lives ought to be sacrificed in order to justify such precautions is a calculation few of us would care to make, but as the means used would be simple and inexpensive even a poverty-stricken corporation—to say nothing of that of Manchester—might venture to adopt them. "The coroner commended Higgins and the others for their bravery, and expressed a hope that the attention of the Corporation would be drawn to it." A solicitor from the Town Clerk's office watched the proceedings on behalf of the Corporation.

Another Danger of Sewer Cutting.

Another inquest was recently held as to the death of a Corporation workman, who was killed while working in a new sewer cutting in Butler-street. Two out of three cartridges which were sent down the shaft for explosive purposes were placed by William Day. Only two reports were heard when they were fired, but it was thought that a couple must have gone off simultaneously. Work was therefore resumed, but in an hour and a half the third cartridge exploded, killing the deceased. "No blame was attached to anybody," and the verdict was "Accidental death," but the jury expressed the hope that something would be done for the widow. The coroner said it would be better if one cartridge were fired at a time. Some means ought to be taken to prevent the possibility of such an accident in the future, and as Mr. Miller, from the Town Clerk's office, the City Surveyor, and Mr. Robinson, inspector of explosives, were present no doubt the matter will receive careful consideration.

Noxious Vapours in Miles Platting.

The Ship Canal is not the only resource Manchester possesses for the production of bad odours. A largely attended meeting of the Newton and District Sanitary Association—almost entirely a working-men's society and one of the offspring of the Manchester and Salford Sanitary Association—was held yesterday week in St. Mark's Schools, Holland-street. This is a very populous part of Manchester occupied almost exclusively by mills and manufactories and by those who work in them, with a clergyman and medical man to be met with here and there, and it has endured more than most neighbourhoods from sickening and injurious smells. It must be hoped that some good may come of the two following resolutions, which were passed unanimously: "That we again respectfully draw the attention of the corporation to the condition of this neighbourhood as to noxious vapours. The people in the immediate vicinity of the chemical works are continually suffering from the effects of sulphuretted hydrogen and other gases injurious to health. We therefore earnestly request that steps be immediately taken by the proper authorities to compel the manufacturers to carry on their work without injury to those whose circumstances compel them to live in this district. We are convinced that

this can be done by care and proper plant." The second was as follows: "That we congratulate the corporation on having received power from the Local Government Board to manufacture their own gas by-products at Bradford-road Gasworks, and sincerely hope that they will begin to do so as soon as possible, as we believe that such action will greatly benefit this neighbourhood from a sanitary point of view." This resolution is delicately conceived, and the gentle flattery conveyed may induce the corporation to avoid the manufacture of worse smells than those at present prevailing.

Suicide in Prestwich Asylum.

An inquest was held last week touching the death of an inmate of the Prestwich Asylum. In November last he assaulted his daughter with a hammer, was found insane, and committed to the asylum. On Friday, Sept. 18th, his discharge was made out, he was certified safe, his relations were communicated with, and on the same day he was put to assist the dispenser in the dispensary. The next day his son went to take him away and one of the attendants sent him into a room to prepare for leaving. He was found there a quarter of an hour afterwards in convulsions and died very shortly. A tin of pure carbolic acid was found in his pocket and the necropsy showed that he died from that poison. The report states that he had often said that as he had brought disgrace on his family he could never face the world again. The verdict was "Suicide whilst of unsound mind," showing that the jury were not of the same opinion as the asylum authorities, who on the previous day made out his discharge and certified him as safe. It is a grim comment on this deliverance that on that same day, in all probability while employed in the dispensary, he secured the carbolic acid wherewith to compass his end. The occurrence of such cases as these—and they are not very rare—shows the difficulty met with by the most experienced and conscientious asylum physicians in fathoming "the mind diseased," and suggests the question whether it is ever safe and right to turn a once homicidal or suicidal lunatic out on the world again.

Sept. 29th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Convalescent Home at Grange-over-Sands.

HAVING secured two acres of ground at Grange-over-Sands the friendly societies of the north-eastern counties are building for themselves a convalescent home upon it. The administrative block and one wing of the home are at present in process of erection. The situation is a sheltered one, 100 ft. above the level of the sea, commanding beautiful views of the bay and the surrounding hills. The cost of the building will be some £3000, and when it is finished it will accommodate seventy or eighty inmates.

Extension of the Monkwearmouth and Southwick Hospital at Sunderland.

This hospital, situated in the midst of large and important works, is in the process of being considerably increased in size. It was only opened in 1874, but the demands upon its resources have steadily increased. Last year 4150 patients were relieved by the charity. The private subscriptions amounted to only £126, the chief source of income being derived from the artisans, who subscribed £524 during 1895. Hitherto the hospital has had accommodation for men only as in-door patients, but provision is now being made for the treatment of women also. Lady Londonderry will open a bazaar in the Drill Hall, representing Paris in the seventeenth century, on Nov. 10th in aid of the building fund, and it is fully anticipated that a considerable sum of money will be raised.

The Durham Extra Arts Examination for Degrees in Medicine and Science.

Out of fifty-eight candidates entered for this examination at the Durham University last week only eighteen succeeded in satisfying the examiners. Complaints are made that this examination is a too severe test. There must be a screw loose somewhere, but whether the University is too stringent or the school education is at fault are questions not to be hastily answered. A youth certainly should be able to pass the Arts examination, enabling him to graduate in medicine or science at the Durham University if he has been fairly well educated, and no blame should be attached to the University for rejecting candidates of inferior education or capacity. It may be that the school education is deficient, and much that one sees in other directions rather encourages this view. Boys from the large public schools are so seldom able to pass the examinations at Woolwich or even Sandhurst without the aid of a "crammer" that one can hardly resist the explanation that the system of school education is wanting in some particular and is not in accord with the requirements of the examinations for the Services and Universities.

Sept. 30th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

A New Medical Journal in Scotland.

As has been already mentioned in this column a movement has been on foot in Edinburgh for some time with a view to starting a new medical journal which should be the property of the profession, and should represent medicine in Scotland more fully than has hitherto been the case. The proposal has been so strongly backed financially as well as by promises of literary contributions and so heartily approved of by a large and influential section of the profession that it has been finally decided that the new journal shall appear in January. It will be published monthly under the direction of an editorial committee with an acting editor and be issued from one of the leading publishing houses. It is understood that the prospectus will be issued in the course of a few weeks.

Glasgow University.

The examination period is again with us. During the past week the various preliminary or entrance examinations have been in progress and will continue until Oct. 2nd. The number of candidates for entrance to the Science and Arts Faculties is 250, whilst seventy names have been entered for the medical preliminary examination. These numbers added to the number of entrants in the spring show an increase upon the figures of last year. Next week the various professional examinations will begin. In each case the lists show a number of women candidates. The session both at Gilmarehill and Queen Margaret College is to commence on Oct. 15th. Anderson's College medical school is also to open on the 15th, but at St. Mungo's College and the Royal Infirmary the session will not commence until the 21st.

University of St. Andrews.

The University is not to be frightened by new experiments. Only recently it was decided to appoint a lady to one of the University assistantships and now the court has recognised the lectures of a lady in the subject of physiology. Presumably St. Andrews is anxious to cultivate the gentler sex, as may be gathered from these facts and from the offer of a large number of bursaries to women on condition that they study medicine at St. Andrews. Opinions may differ upon this method of starting a medical school, but if only the University authorities could come to terms with Dundee—which has command of clinical facilities—there seems no reason why in time St. Andrews should not take some part in medical education. A motion intimated by the Rev. Dr. Anderson at the last meeting of the court, if successful, is not likely to promote university prosperity. This is to the effect that no assistant to a professor shall hold office beyond three academical years. The effect of such a decision would be to weaken the university on the very side on which already it is generally recognised that the Scottish university system needs strengthening. The small amount of the emolument, the uncertain tenure of office, and the absence of any definite prospect of promotion make, even under present circumstances, the position of the university assistant anything but a satisfactory one. Consequently many young men of great promise are lost to the university. But if it is to be determined that no assistant shall remain in office longer than three years it it is manifest that the position must cease to attract young men to remain and work at St. Andrews, as here is a direct announcement that their capacity will not be recognised. How this will affect the teaching in the colleges it is for the

authorities to judge, but it is certain, first, that the quality of the assistants must deteriorate and, secondly, that St. Andrews will under the proposed regulation cease to breed its own professors.

Unsound Meat in Glasgow.

The sanitary authorities in Glasgow have become so well known for their promptitude and energy in preventing the entrance into the city of meat unfit for food that persons anxious to dispose of carcases in a questionable condition find it to their advantage to try their luck in other markets. A recent prosecution will tend to confirm this impression as well as help to produce carefulness in the retailer. The secretary of the St. Rollox Coöperative Society was summoned for having exposed for sale beef in pickle which was unfit for human food. The condition of the meat was certified by Dr. Chalmers, one of the medical officers of the city, and the defence was to the effect that there was no intention to sell the beef. The magistrate refused to accept this view and inflicted a fine of three guineas.

Medical Vacancies.

The directors of the Victoria Infirmary, Glasgow, have decided to appoint a physician for diseases of women in the out-door dispensary. There will be a vacancy in the position of obstetric physician to the Glasgow Maternity Hospital in November, Dr. Lawrence Oliphant's period of office terminating at that date. The chair of botany in Anderson's College Medical School is vacant in consequence of the death of Professor Thomas King. Mr. King also held the position of lecturer on botany in the Technical College. The applicants for this last position include Dr. Bell Todd and Mr. Cormack, B.Sc., formerly lecturer on botany in Queen Margaret College.

Aberdeen University: Extension of Buildings.

The executive committee have now resolved to proceed with the erection of the south wing which forms part of the plan of extensions at Marischal College, according to designs by Mr. A. Marshall Mackenzie, A.R.S.A., Aberdeen. The estimated cost is £11,500. The funds in hand will not permit of the construction in the meantime of the terminal tower at the south wing. The Natural Philosophy department will be accommodated in this wing. At the commencement of the medical winter session on Oct. 13th the chemical classes will find themselves located in a finely equipped suite of rooms in the new north wing. The masonry work of the terminal tower there is finished with the exception of the ornamental battlements and pinnacles. The walls of the wing and tower are constructed of white Aberdeenshire granite, the exposed surfaces of the stones being finely dressed with the patent axe for finish—a style of finish which has been happily called "chasing." It is expected that the Chancellor of the Exchequer will personally visit Aberdeen at an early date to inspect the progress of the extensions at Marischal College in view of the application that has been made for an additional Government grant for the building scheme.

Sept. 30th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Richmond District Lunatic Asylum.

THERE are now forty-two cases of the rare Eastern disease beri-beri under treatment in this asylum, one of them being that of a nurse attached to the institution. The precise nature of the disease is, however, doubtful in three of the cases, and no death has up to the present occurred. At the fortnightly meeting of the board of governors, which took place on Sept. 23rd, it was stated that the number of patients in the asylum was 1725, being 620 above the normal limit of its accommodation. Mr. Conolly Norman, the resident medical superintendent, offered to vacate his quarters so that they might be devoted to provide increased accommodation for the patients. After some discussion it was resolved that Mr. Norman's suggestion should be adopted, and that he should leave his house as soon as possible, so that it might be converted into a series of apartments for female patients. It is plain that the governors of the Richmond Asylum have allowed themselves to drift into a serious difficulty. The building of the auxiliary asylum at Portrane has only just been commenced, and as it will cost £120,000 it is improbable that it can be available for use under a year. On the other hand, there is a strong preponderance of evidence that the disease depends on a specific organism found in the blood of those affected in the forms of rods and cocci, and that infected houses and soil which is saturated with the germs maintain the disease, so that patients must remove to a district which is free or return to the infected place only to relapse. The Richmond Asylum, from this the point of view of recent pathology, must be considered as now infected with the specific organism of beri-beri. The disease is endemic there, and nothing short of disinfection, which would require the removal for a time of almost all its inmates, would probably suffice to destroy the germs and eradicate the disease. Such a measure, if it proves to be necessary, will cause very serious trouble and expense. The board of governors of the Ennis Asylum seems to be alive in reference to the latter difficulty, and a resolution passed by that board of governors was received and adopted by the governors of the Richmond Asylum, suggesting that the Government should in future defray the expense of maintaining the insane poor of Ireland out of the Imperial funds.

Glenwherry Dispensary, county Antrim.

Mr. Brownlees of Larne has been appointed medical officer of Glenwherry Dispensary, in room of Dr. McMaster, who has recently been elected to a similar position at Broughshane.

The Royal University Examinations.

These examinations, which began on Sept. 22nd, are now in full swing and will terminate on Oct. 9th. The college medical session at Belfast will begin earlier this year, on Oct. 20th, and will terminate at the end of March, so as to leave April clear, and it is hoped the authorities of the Royal University will arrange to have their summer medical examinations in April, as in this way teachers in the Queen's Colleges who examine in the Royal University will not be obliged to stop lecturing for a time in the summer session as at present, in order to go to Dublin in May to examine.

The Amalgamation of Poor-law Unions in Ireland.

At a special meeting of the Poor-law guardians of Coleraine on Sept. 26th the following resolution was unanimously passed: "That this board, believing that the number of workhouses in Ireland is largely in excess of the need of the present population and that their unnecessary maintenance not only involves a great waste of money but also tends to manufacture and perpetuate pauperism, heartily approves of legislation having for its objects the amalgamation of unions and consequent reduction in number of workhouses."

Hospital Saturday at Cork.

Cork can boast of having at least as many hospitals as any city of its size in the United Kingdom, and the affluent citizens as a rule can take to themselves the credit of supporting them as generously as their means can afford; but, on the other hand, there is a percentage of the population who never contribute anything to such deserving charities unless personally appealed to. Even the latter can have no excuse for withholding their aid on Hospital Saturday. To Alderman Horgan the suffering poor of the city and county of Cork are indebted for having established "Hospital Saturday" in the year 1891, when he was mayor of the city. Since then it has been the medium, year after year, of contributing no mean addition to the financial resources of the various hospitals. This year the mayor, Sir John Scott, aided by an energetic committee, named last Saturday for the collection, and the organisation was complete in every detail, the fire brigade in particular lending valuable service. The street collection amounted to £232 7*s.* 6*d.* The results of the collections in the various large shops and similar institutions have not yet been sent in, but it is known that the employés of the Cork Steam Packet Company have contributed at least £100. The committee mention in their report that they "have been asked by the ladies in charge of the several stations to state that this year, as in former years, they were treated with the greatest courtesy by all classes."

Important Appointment by the Sanitary Authority at Cork.

At the last meeting of the Cork Public Health Committee Mr. Donovan, general medical superintendent of health, urged the committee to appoint a competent plumber as sanitary inspector, and pointed out that years ago he had made a similar recommendation. The committee unanimously approved of his suggestion, and the town

council last week, by a large majority, endorsed the action of the committee. This is certainly a step in the right direction, and one on which Mr. Donovan and the council must be congratulated. The sanitary condition of the city has been greatly improved, but of course much still remains to be done. However, it is well to recollect that "great bodies move slowly," and we should also bear in mind that sanitary science, still in its infancy, is even now regarded by otherwise intelligent men as belonging to the domain of "faddists." Much may be expected from the new appointment, as heretofore the inspection as the result of the operation of the Notification of Contagious Diseases Act was often of a very perfunctory character, Speaking generally a sanitary officer called, and perhaps glanced at the watercloset, but usually there was no real attempt at grappling with the cause of the disease. Sewer-gas might still belch in disease-bearing germs through disjointed pipes. Then when the patient was well or dead the representatives of the sanitary authority came round again and gave a sense of false security by disinfecting the house, but the leak was unsecured and the risks to the occupants remained the same. The action of a sanitary inspector under such circumstances is very like that of the boy who whistles when passing a graveyard at night—he at leasts distracts attention from possible evils.

County and City of Cork Hospital for Women and Children.

It was unanimously resolved at a meeting of the medical staff, "That we, the members of the medical staff of the County and City of Cork Hospital for Women and Children, desire to record the serious loss the hospital has sustained by the death of our esteemed colleague, Dr. Nicholas Grattan, F.R.C.S. Edin., who has been connected with the institution from its foundation, and contributed so largely by his surgical skill to the success which it has now attained, more particularly in the orthopædic branch of surgery, in which he had earned a world-wide reputation. We earnestly unite in expressing our deep sympathy with Mrs. Grattan and family in their sad bereavement. (Signed) N. J. Hobart, W. Ashley Cummins, C. Yelverton Pearson, Philip G. Lee, H. Hobart."

Sept. 28th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

International Congress for the Protection of Infancy.

To rescue the infant population from the vicious surroundings, moral and physical, in which, particularly in great cities, it lives and moves; to place it under healthy conditions—hygienic, educational, and social; with that view to enlarge the right of the State to intervene between the child and the unworthy parents so as to withdraw the child from a parental authority negligent or worse:—such is the object of the International Congresses, already two in number, for the Protection of Infancy which have been held in 1895 at Bordeaux and in 1896 at Geneva. The former of these was mainly occupied with the legal difficulties in substituting State for parental control; the latter, which closed quite recently, moved a step further, and went into a series of projects, more or less feasible, for rehabilitating the child when rescued from denaturalised parents. One laudable feature of the projects in question was the insistence of their authors on the hygienic, as distinguished from the educational and social, factors of rehabilitation—investigation, for example, into the family history from the medical point of view, to begin with, taking note of chronic alcoholism in the parents or of inherited neuroses, bodily or mental. So impressed was the Geneva Congress with the necessity of duly and practically considering the former of these transmitted lesions (the alcoholic) that it adopted a special resolution detailing the best mode of dealing with it; while, in furtherance of the same line of action, it discussed largely the question of infantile nutrition, going minutely into such details as the "Pasteurisation" of cow's milk. On the basis of "rehabilitated physique" the Congress gave subsequent consideration to the mental and social upbringing, M. Barthes, for example, "Inspecteur des Enfants Assistés d'Eure-et-Loire," carrying a motion for the institution of a society for the protection of indications of the tenor of the Geneva Congress will serve to show the enlightened and practical nature of the philanthropic intervention now being organised in behalf of infant-life—intervention already rewarded with encouraging success infancy in every town possessing 20,000 inhabitants. These in Switzerland and even in France, but still requiring extension and support in the more backward nationalities—in none more than in Italy. Readers of THE LANCET are familiar with the hard conditions under which childhood struggles up into puberty and thence into manhood in the Italian kingdom; how legal enactments for the protection of youth of tender years and both sexes from premature work in factories are so disregarded that on the rare occasions of their being invoked their official interpreters have avowed that they had forgotten their existence. Into the sufferings of children in Sicilian sulphur mines I need not enter, any more than into the "white slavery" so frequently the portion of the Calabrian or Neapolitan boy or girl sold to the itinerant "impresario" to make the tour of continental cities, with the inevitable initiation into vice or crime at the most impressionable age. Italy, if only in response to the despairing appeal of one of her greatest publicists—an appeal entitled "Salviamo i Fanciulli" (let us save our children)—has for some time been bestirring herself in the direction taken by France and Switzerland; but with an unpractical initiative that argues her newness to combined philanthropic effort she times her first great meeting within less than a month after the Congress convened for the same purpose at Geneva. But better even an inopportune meeting than none at all; and so her well-wishers throughout Christendom must hail as of specially good omen her announced "Congresso Internazionale per l'Infanzia," which, for the first time in Italy at least, will assemble in Florence on Oct. 5th and will conclude its sittings on the 10th. Its programme, I need scarcely say, re-traverses much of the ground already occupied at Bordeaux and Geneva; but there will also be novel features such as Italy alone can contribute—features lending a dramatic, even sensational, interest to the proceedings. For those, therefore, who have lately followed attentively the discussions of the Geneva Congress there remains not a little to reward participation at its Florentine successor, and therefore I take this opportunity of mentioning that the Organising Committee holds out special facilities for all intending visitors from abroad—facilities including reduced railway fares on the various lines throughout the kingdom. Tickets of membership may be had on application to the President of the Executive Committee, Signor Adulfo Scander Levi, Piazza d'Azeglio, No. 7, Florence, if accompanied by ten francs in gold (*8s. 4d.*) addressed to the treasurer, Signor Lamberto Lamberti, Piazza del Duomo, No. 1, in the same city.

Communal Practitioners and their Pay.

The twenty-four communal practitioners on duty in the suburbs of Milan have memorialised the Giunta of that city for an increase of pay—seemingly without success. These gentlemen set forth that their labours have multiplied in sympathy with the multiplying population, while their professional incomes have been curtailed by the diffusion of free ambulances, to which many of them give their services gratuitously. Their duties have also been increased by recent legislation for the suppression of contagious diseases, necessitating the filling-up of many papers embodying the results of personal visitations and prescriptions or actual surgical interference. The yearly vaccinations they have to practise have also had to be supplemented by nearly as many re-vaccinations. For all this they get the annuity of 2500 lire, nominally £100 in English money—really less. They enjoy, it is true, some privileges in the way of locomotion to distant points within their beat, but loss of time is inadequately compensated by this indemnity. Moreover, they have to pay, it is to be remembered, the heavy income-tax (*ricchezza mobile*) levied on all bread-winners, however humble their earnings, throughout Italy—that is to say, by that impost alone their nominal £100 a year is reduced to something like £86. Truly, their case is a hard one. With every allowance for the lower scale of living in Italian compared with British towns, the remuneration of these much-tried practitioners seems quite disproportionately small; certainly discreditably so in a city that boasts itself the most opulent and progressive in Italy.

Small-pox in Verona.

Few Italian cities in the second line of importance receive more attention from the English-speaking tourist than

Verona, with her amphitheatre, her tombs of the Scaligero, and her associations with Catullus and Shakspere. The greater reason, therefore, why a word of warning should come from THE LANCET as to the sanitary dangers that beset both city and suburbs. Small-pox has for weeks past been steadily invading her more crowded quarters—the Piazza di San Zeno particularly. There the people are huddled together as in a rabbit-warren under the worst hygienic conditions. Successive communal administrations, it is said, have never thought of cleansing and rehabilitating that and other centres of contagion. Probably the reduced numbers of the visiting public and the loss of hotel custom will, by the *argumentum ad crumenam*, supply the incentive which mere sanitary duty has failed to give.

Sept. 28th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

The Cold Bath in the Treatment of Pneumonia in Children.

IN an interesting pamphlet on the use of the cold bath in the treatment of pneumonia in children Dr. Buxbaum, assistant to Professor Winternitz, recommends that attention should be directed to the weakness of the heart, the disturbance of the nervous system, and the congestion and hyperæmia of the lungs; at the beginning of the illness the hyperæmia of the lungs is active and during the progress of the case it is passive. The hyperpyrexia rarely requires energetic treatment, and in asthenic conditions a reduction of temperature may even be contra-indicated. Dr. Buxbaum employs baths at a temperature of from 18° to 22° C. (from 64° to 72° F.), combined with cold douches, whereby the fever is diminished. Children present but little resistance to reduction of temperature, and the decrease sometimes amounts to 3° C. after the bath. As a precaution against collapse the bath ought not to last longer than five minutes and is on no account to be continued if the child shows signs of shivering. The improvement of the respiration during the bath is a favourable symptom; the heart's action is strengthened, the resistance in the peripheral parts of the circulation is diminished by the dilatation of the vessels of the skin, and the right ventricle, which is especially endangered, is thereby relieved. According to Romberg the influence of the vaso-motors is of great importance in disease of the respiratory tract, and the obstruction of the circulation is due to paresis of the vaso-motors caused by the pneumococcus. Dr. Buxbaum mentioned the case of a child who had developed whooping-cough two months previously and whose respiratory tract was to all appearance seriously involved. The child was emaciated, the skin was dry and cyanotic, the respirations were irregular (amounting to about 52 per minute), and examination of the chest showed that there was broncho-pneumonia. Dr. Buxbaum ordered a bath at 20° C. with douches and rubbing for three minutes, after which the respiration became regular and the pulse stronger. The bath was repeated twice a day, and at the end of two days the pulmonary dulness disappeared, only moist, coarse crepitation remaining.

Deciduoma Malignum.

At the last meeting of the Obstetrical Society Dr. Julius Neumann gave full details of the clinical history and post-mortem appearances of a case of deciduoma malignum occurring in a woman thirty-five years of age. Four weeks after her last confinement she was seized with profuse hæmorrhage, which persisted in spite of the use of ergotin and other hæmostatic remedies; she also had pains in the abdomen, the external os uteri admitted one finger, the cervix was closed, the uterus was somewhat enlarged and movable, and its consistence was diminished. The diagnosis was verified by microscopical examination of the curetted tissue and total extirpation was performed. Some weeks after the operation the patient began to expectorate a copious brown sputum containing numerous elastic fibres and epithelial elements with pus cells; she also became very ill, and ultimately died from general exhaustion. The uterus was shown by Dr. Neumann. It had, especially in the body, the appearance of a gravid uterus; hyperæmia and serous infiltration of the muscular layer were well marked. At the fundus there was a growth of a greyish and necrotic colour of the size of a pigeon's egg, which extended to the origin of the Fallopian tube, and was apparently a large-celled sarcoma with the typical "syncytium." Both lungs contained tumours, some of which had already invaded the visceral pleura. Dr. Neumann pointed out the necessity of making an early diagnosis and performing vaginal hysterectomy.

A Newly-discovered Constituent of the Blood.

Dr. Müller has given an account of certain objects, not hitherto described, which are to be found in every sample of blood, both in health and disease. They resemble fat globules, but must not be confounded with fragments of the white or red corpuscles; their size is variable, the largest diameter being 1 μ (= $\frac{1}{25000}$ of an inch). They may be seen to show movement and are not affected by osmic acid. Dr. Müller has named them "hæmokonia" (blood dust).

Antitoxin Treatment of Diphtheria in Austria.

Professor Paltauf has published statistics of 1103 cases of diphtheria in which antitoxin was employed, with the result of 970 recoveries and 133 deaths, equivalent to a mortality of 12·5 per cent. He lays much stress upon the early application of the serum, for in the case of injections made on the second day of the disease the mortality amounted to 6·7 per cent., whereas in those made on the third day it amounted to 19 per cent., in those on the fourth to 23 per cent., in those on the fifth to 31 per cent., and in those on and after the sixth to 33·3 per cent. Professor Paltauf makes mention of the epidemic of diphtheria in Ischl, where in December, 1895, all those children died who had not received the antitoxin treatment; whereas in January, 1896, in the cases of sixteen children attacked with the disease and treated with antitoxin the result was in every way successful.

Intra-Uterine Colpeurysis.

In an article published in the *Medicinische Blätter* Dr. Braun points out that colpeurysis is to be performed—(1) for the purpose of emptying the uterus in urgent cases of eclampsia during both pregnancy and labour; (2) in cases of induction of premature labour; (3) in prolapse of the umbilical cord by the side of the head, or in transverse presentation, if an operation is to be performed after premature rupture of the fœtal membranes, the os uteri being undilated; and (4) in cases of lateral placenta prævia where artificial rupture of the fœtal membranes is indicated, but the bleeding nevertheless persists. According to Dührssen, the employment of intra-uterine colpeurysis improves the prospect of saving the child's life in cases of placenta prævia.

The Vienna Medical School.

The calendar of the Vienna University shows that during the winter half-year 1896–7 271 courses will be held at the medical school by 29 ordinary professors, 36 extraordinary professors, and 94 *privat docents* and assistants. The number of courses in the various subjects is as follows:—history of medicine, 2; anatomy, 8; physiology, 13; pathology, 16; pharmacology, 6; medicine, 63; surgery, 47; otology, 13; ophthalmology, 28; midwifery and gynæcology, 29; syphilis, 17; mental pathology, 8; public health, 10; chemistry, 9; and veterinary medicine, 2. There were 2228 students of medicine enrolled during last summer half-year, and 2338 during the corresponding period in 1895.

Sept. 26th.

Medical News.

DURHAM UNIVERSITY.—A Convocation was held in the Castle hall on Sept. 26th, the Warden (Dean Kitchin) presiding, when the following degrees were conferred:—

Doctor of Medicine.—Robert A. Bolam, Frederick A. Cooke, William H. D. P. d'Esterre, James H. Hunter, Thomas Horton, Charles Meaden, Simpson Powell, and Hubert Ll. Rutter.

Doctor of Medicine (Practitioners).—William Bain, Thomas C. Booth, Lancelot P. Booth, Thomas H. Chittenden, Roger Edwards, Edgar English, John Ferguson, William F. Melis, and Thomas E. White.

Bachelor of Medicine.—Edwin G. E. Arnold, Vaughan Pendred, Bertram Addenbrooke, Maurice F. Squire, William H. Brown, Richard H. Bellwood, Charles H. Clarke, William J. Codrington, George Norman, Alfred G. C. Pocock, Francis W. Rix, Walter E. Rudd, Eustace W. Sumpter, Edward Tonge, John Wreford, and Allan Warner.

Bachelor of Surgery.—Bertram Addenbrooke, Edwin G. E. Arnold, William H. Brown, Charles H. Clarke, William T. Codrington, George Norman, Maurice F. Squire, Eustace W. Sumpter, and Edward Tonge.

Bachelor of Hygiene.—Charles V. Dingle.

Bachelor of Science.—Alexander L. Mellanby.

Diploma in Public Health.—Percy Evans.

PRIZEMEN AND MEDALISTS AT THE METROPOLITAN MEDICAL SCHOOLS:—

King's College, London, Faculty of Medicine.—Senior Scholar, R. P. Williams; Second-year Scholar, W. H. M'Mullen; Junior Scholars, F. C. Carlé, W. L. Stuart, and A. C. Williams. Warneford Scholar, Class II., M. S. Mayou; Class I., R. N. Batterbury; J. G. Pritchard and H. G. Wright (bracketed). Sambrooke Exhibitions, W. L. Stuart, A. C. Williams. Worsley Scholars, W. H. Lowman, P. P. Tobit. Leathes Prize: T. H. Gardner. Warneford, first prize: T. H. Gardner; second prize: L. D. Saunders. Jelf Medal: M. S. Mayou. Tanner Prize: C. T. Lewis. Barry (Divinity): W. H. Lowman. Divinity: J. A. Bachs. Anatomy: A. Brown. Physiology: C. A. Sprawson. Chemistry: C. A. Sprawson. Medicine: F. C. Clifford. Clinical Surgery: C. T. Lewis. Special prizes: G. L. Atkinson and H. N. Harness. Surgery: F. C. Clifford. Forensic Medicine: T. H. Gardner. Materia Medica: C. A. Sprawson. Hygiene: T. H. Gardner. Obstetric Medicine: G. A. Roberts. Pathological Anatomy: T. H. Gardner. Comparative Anatomy and Zoology: W. W. Campbell and W. H. Lowman (bracketed).

London Hospital Medical College.—Entrance Scholarships: Epsom Scholarship, value £126: Mr. E. F. Fisher. Price Scholarship in Science, value £120: Mr. H. E. Ridewood. Entrance Science Scholarship, value £60: Mr. A. B. Lindesey. Entrance Science Scholarship, value £35: Mr. C. E. Ham. Price Scholarship in Anatomy and Physiology open to students of the Universities of Oxford or Cambridge, value £60: Mr. E. W. A. Walker.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—The following scholarships have been awarded:—Natural Science Scholarships, Sept., 1896: £105, Mr. C. C. C. Shaw; £52 10*s.*, Mr. W. J. Morrish; £52 10*s.*, Mr. J. Gay-French; and £52 10*s.*, not awarded. University Scholarship: £52 10*s.*, Mr. A. G. Witson, B.A; and £52 10*s.*, not awarded.

PRESENTATION.—On Sept. 17th, at a well-attended meeting in the St. Saviour's Mission-room, Fleet-road, of the members of the Haverstock-hill and Malden-road Provident Dispensary, Mr. A. F. Gervis, L.R.C.P. Lond., M.R.C.S. Eng., was presented with a valuable clock and pair of vases, the clock bearing on a brass plate the following inscription: "Presented to Arthur F. Gervis, M.R.C.S., L.R.C.P. Lond., as a mark of gratitude and esteem from his patients on his leaving the Haverstock-hill and Malden-road Provident Dispensary. August, 1896."

KING'S COLLEGE, LONDON.—From the report of the Bacteriological Department of King's College, London, we learn that the Council of King's College has increased the accommodation of the laboratory to give additional facilities for the carrying out of original researches. There are several courses of lectures and demonstrations each session, and the course for the Diploma of Public Health is given by Dr. Newman, D.P.H., under the direction of Professor Crookshank. The laboratory reopened on Oct. 1st and the practical courses will commence on Oct. 5th.

TORQUAY MEDICAL SOCIETY.—On Thursday, Oct. 8th, at 5 P.M., Dr. Burney Yeo will deliver an address to the above society entitled "A Pathological Retrospect" in the museum of the Torquay Natural History Society, Babbacombe-road. Members of the profession outside the Torquay district will be welcomed on giving notice beforehand to Mr. C. H. Wade (hon. sec.), Greenway, Cheston, Torquay, of their intention to be present. The annual dinner will be held at the Torbay Hotel after the meeting. Tea will be provided before the meeting.

PUBLIC MEMORIAL TO THE LATE DR. ALEXANDER WILSON OF MID-CALDER.—A public memorial, erected in Mid-Calder churchyard to the memory of the late Dr. Wilson of Mid-Calder by his numerous friends, was unveiled on Saturday, Sept. 26th, by the Rev. Thomas Aiton of Livingstone, in the presence of an interested and appreciative gathering. The memorial takes the form of a Celtic cross of Aberdeen grey granite, with a medallion of the late Dr. Wilson in the centre of the cross. Mr. Aiton, in the course of his remarks, bore testimony to the genuineness, manliness, integrity, and simplicity of the deceased gentleman's character, and to the respect and love in which he was held by patients and friends alike. The memorial bears the following inscription:—"To the memory of Alexander Wilson, M.A., M.D., Aberdeen University, who died at Mid-Calder, 7th June, 1894, aged forty-five years. This monument has been erected by his numerous friends as a tribute of respect in recognition of his many excellent qualities, and appreciation of the valuable services rendered to the community during a period of twenty-two years. Beloved as a friend, eminently skilful and trusted as a physician, of a kind and genial nature combined with reserve in his vocation, in these and other respects the ideal physician, the whole life of Dr. Wilson bore testimony to his keen appreciation of, and belief in, the truth contained in the maxim, 'silence is golden.'"

WIGAN MEDICAL SOCIETY.—An ordinary meeting of the above Society was held on Sept. 15th. Mr. Wm. Mitchell Roocroft was in the chair at the commencement of the business, and afterwards Mr C. R. Graham (President) presided.—Dr. Rees read a paper on the Remuneration of Medical Men. The paper was a very interesting one and touched on the overcrowding of the profession, underselling, clubs and medical aid associations with canvassing and touting for such appointments. The paper was listened to with marked attention, as it bristled with suggestions as well as pointed out remedies for the abuses complained of. Dr. Rees alluded to the Battle of the Clubs in other towns and advocated the establishment of a medical union in connexion with the society on similar lines as laid down by some of the societies in the towns mentioned.—Almost every member present took part in the discussion, and Dr. Rees was requested to publish his paper, so that copies of the same might be obtained for the society and circulated amongst its members and the other practitioners in the district with a view to a further consideration of the subject.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAMS, W. F., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Junior Assistant Medical Officer at the Cornwall County Asylum at Bodmin.

ASHTON, GEORGE, M.B., Ch.B. Vict., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed House Surgeon to the Manchester Southern and Maternity Hospital.

ATKINSON, H. L., M.D. Melb., M.R.C.S. Eng., has been appointed an Honorary Medical Officer to the Bendigo Hospital, Victoria, Australia.

BANNISTER, WM., M.R.C.S., L.S.A., has been re-appointed Medical Officer of Health by the Havant Urban District Council.

BARR, V. H., L.R.C.P. Lond., M.R.C.S., has been appointed a Public Vaccinator for the District of Ohaeawai, New Zealand.

BOULTON, ARTHUR, M.R.C.S., L.R.C.P. Lond., has been re-appointed Medical Officer of Health by the Horncastle Rural District Council.

BROCK, E., M.R.C.S. Eng., has been appointed an Honorary Medical Officer to the Kilmore Hospital, Victoria, Australia.

CONNOLLY, F. G., M.R.C.P. Lond., M.R.C.S., has been appointed a Member of the Queensland Central Board of Health.

COOKE, C. W., M.D. Lond., L.R.C.P., M.R.C.S., has been appointed Medical Officer to the Willesden Cottage Hospital vice Buckle.

DALAL, RATONJEE DINSHAW, M.R.C.S. Eng., L.R.C.P. Lond., L.M. & S. Bombay, has been appointed Resident Medical Officer of the Finsbury Dispensary.

DERHAM, T. H. C., M.B. Edin., has been appointed Junior House Surgeon to the Preston and County of Lancaster Royal Infirmary, vice L. E. Hardy, M.B.

DOWLING, F. J., M.R.C.S., L.S.A. Eng., has been appointed an Honorary Medical Officer to the Kilmore Hospital, Victoria, Australia.

EDWARDS, H. N., M.R.C.S., L.R.C.P., has been appointed Clinical Assistant to the Chelsea Hospital for Women.

FARTHING, THOS., M.B., C.M. Edin., has been appointed Deputy Medical Superintendent of the Dartford Joint Hospital Committee.

FENTON, C. F., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Barking Urban District.

FENWICK, SAMUEL, M.D. St. And. and Durh., F.R.C.P. Lond., has been appointed a Consulting Physician to the London Hospital.

FORD, A. M., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Health Officer for the Shire of Tambo, Victoria, Australia.

GANE, E. P. S., L.R.C.P. Lond., M.R.C.S., has been appointed an Assistant Medical Officer to the Christchurch Hospital, New Zealand, vice Crosby.

GUNN, JOHN, M.B., Ch.M. Glasg., has been appointed Public Vaccinator for the District of Kaikoura, New Zealand.

HARDY, LEONARD, M.B., C.M. Edin., has been appointed Senior House Surgeon to the Preston and County of Lancaster Royal Infirmary, vice W. H. Pimblett, M.B. Edin., resigned.

HARNETT, C. J., L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to Guy's Hospital, London.

HOPE, T. C., M.B., Ch.M. Glasg., has been appointed an Honorary Medical Officer to the Geelong Infirmary and Benevolent Asylum, Victoria, Australia.

JENKINS, GEORGE HARRISON, L.R.C.P. Edin., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer of Health for the Usk Urban District Council and Pontypool Rural District Council, also Medical Officer and Public Vaccinator for the Usk District, Pontypool Union.

LAWLER, W., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer to the District of Newtownbarry, Enniscorthy Union.

LYONS, WILLIAM, L.R.C.P. Lond., M.R.C.S., has been appointed a Member of the Queensland Central Board of Health.

MACKENZIE, A. C., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed a Licensing Magistrate for Mount Morgan, Queensland.

MCKEE, J. C., L.R.C.P., L.R.C.S. Edin., has been appointed an Honorary Medical Officer to the Bendigo Hospital, Victoria, Australia.

MCLEAN, W. H., M.B., Ch.M. Edin., has been appointed Public Vaccinator for the District of Nokomai and Switzers, New Zealand.

MARWOOD, A. W., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed an Honorary Medical Officer to the Geelong Infirmary and Benevolent Asylum, Victoria, Australia.

MOFFAT, H. A., L.R.C.P. Lond., M.R.C.S., has been appointed House Surgeon to Guy's Hospital, London.

MULHOLLAND, J. A. D., M.B., Ch.M. Glasg., has been appointed Public Vaccinator for the District of Invercargill, New Zealand.

MURPHY, T., M.B., Ch.B. Melb., has been appointed an Honorary Medical Officer to the Bendigo Hospital, Victoria, Australia.

NEWMAN, F. J., M.B., Ch.B. Melb., has been appointed an Honorary Medical Officer to the Geelong Infirmary and Benevolent Asylum, Victoria, Australia.

OVEREND, E. K., M.B. Melb., has been appointed Health Officer to the Brunswick Town Council, Victoria, Australia, vice Dr. Talbot, resigned.

PANTING, L. C., M.B., B.S. Oxon., has been appointed Assistant House Physician to Guy's Hospital, London.

PHELPS, WM., M.R.C.S. Eng., L.S.A., has been appointed Medical Officer of Health for the Shire of Narracan, Victoria, Australia.

PHILLIPS, H. H., M.R.C.S., L.R.C.P., has been appointed Clinical Assistant to the Chelsea Hospital for Women.

READ, GEO. F., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Assistant Medical Officer and Dispenser to the Hospital for the Insane, New Norfolk, Tasmania.

RENNIE, J. T., M.D. Detroit, U.S.A., has been appointed a Public Vaccinator in South Australia.

RYAN, E. W. ST. VINCENT, has been appointed District Medical Officer for the No. 5 District of the Parish of Battersea.

SIMONS, J., M.D. Amsterdam and Ghent, has been appointed Clinical Assistant to the Chelsea Hospital for Women.

SKINNER, G. H., L.R.C.P. Lond., M.R.C.S., has been appointed an Honorary Medical Officer to the Kilmore Hospital, Victoria, Australia.

SMALL, JOHN, L.R.C.P., L.R.C.S. Edin., has been appointed an Honorary Medical Officer to the Geelong Infirmary and Benevolent Asylum, Victoria, Australia.

SMITH R. B., L.R.C.P. Edin., L.R.C.S. Irel., has been appointed Medical Officer for the Burton Hastings Sanitary District of the Nuneaton Union.

STOKER, H., L.K.Q.C.P., L.R.C.S. Irel., has been appointed an Honorary Medical Officer to the Bairnsdale District Hospital, Victoria, Australia, vice J. R. Fox.

STRANGMAN, T. H., L.K.Q.C.P., L.R.C.S. Irel., has been appointed an Honorary Medical Officer to the Kilmore Hospital, Victoria, Australia.

THOMPSON, J. A., M.D. Brux., L.R.C.P. Lond., M.R.C.S., D.P.H. Camb., has been appointed President of the Board of Health, New South Wales.

TIDSWELL, FRANK, M.B., Ch.M. Syd., has been appointed Medical Inspector for the Board of Health, New South Wales.

TUXFORD, ARTHUR, M.D. Edin., has been re-appointed Medical Officer of Health to the Port Sanitary Authority, Boston.

TYSON, WILLIAM, L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to Guy's Hospital, London.

WADD, H. RANDALL, M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Senior House Surgeon to the Great Northern Central Hospital, London, N.

WHITE, J. H., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer for the Second Sanitary District of the Holsworthy Union.

WIGHT, J. C., M.B., Ch.B. Melb., has been appointed Public Vaccinator at Kyabram, Victoria, Australia.

WOOD, SIDNEY, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Fifth Sanitary District of the Newmarket Union.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BIRKENHEAD BOROUGH HOSPITAL.—Senior House Surgeon. Salary £100 a year, with board and washing.

GESTO HOSPITAL, Island of Skye.—Medical Officer. Salary £200 per annum, with furnished house, fire, and light. Applications to Mr. Joshua MacLennan, Solicitor, Portree, Secretary to the Hospital Trust.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Clinical Clerks to the In-patient Physicians and Clinical Assistants to the Out-patient Physicians.

HOSPITAL FOR WOMEN, Soho-square, London.—Assistant House Physician (non-resident) for three months.

HULME DISPENSARY, Dale-street, Stretford-road, Manchester.—House Surgeon. Salary £130 per annum, with apartments, attendance, coal, and gas.

LONDON HOSPITAL, Whitechapel-road, E.—Assistant Physician.

METROPOLITAN ASYLUMS BOARD.—Assistant Medical Officers at the North-Eastern Fever Hospital, St. Ann's-road, Tottenham, and at the Brook Fever Hospital, Shooter's Hill, Kent, unmarried. Salary £160 the first year, £180 the second year, and £200 the third and subsequent years of service, with board, lodging, attendance, and washing. Applications to the Clerk to the Board, Chief Office, Norfolk-street, Strand, W.C.

METROPOLITAN HOSPITAL, Kingsland-road, N.E.—Dental Surgeon. Also Physician.

NORTHAMPTON GENERAL INFIRMARY.—Resident Dressership. Board, lodging, and washing provided.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London, E.C.—Assistant Physician. Also Resident Medical Officer for six months. Salary at the rate of £100 per annum, with furnished apartments, board, and washing.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant, for six months Board and residence provided.

SWANSEA GENERAL HOSPITAL.—House Physician for one year. Salary £50 per annum, with board, apartments, laundress, and attendance.

WEST HERTS INFIRMARY, Hemel Hempstead, Herts.—House Surgeon and Dispenser, who shall also be Assistant Secretary for two years. Salary £100 per annum, with furnished rooms, board, fire, lights, attendance, and washing.

WOLVERHAMPTON EYE INFIRMARY.—House Surgeon. Terms £60 per annum, with rooms, board, and washing.

YORK COUNTY HOSPITAL, York.—Assistant House Surgeon. Salary £60 per annum, with board, rooms, washing, &c.

Births, Marriages, and Deaths.

BIRTHS.

BEDDOW.—On Sept. 25th, at Rectory-road, Stoke Newington, the wife of Josiah Beddow, M.R.C.S., of a son.

BOWRING.—On Sept. 26th, at The Cottage, Surbiton, the wife of W. A. Bowring, M.R.C.S., L.R.C.P., of a daughter.

CRAIG.—On Sept. 23rd, at Whitbrook House, Bridgnorth, the wife of W. Wallace Craig, M.R.C.S., L.R.C.P., of a daughter.

GORDON DILL.—On Sept. 21st, at Brunswick-square, Brighton, the wife of John Frederick Gordon Dill, M.A., M.D., of a son.

HORTON-SMITH.—On Sept. 27th, at Upper Westbourne-terrace, Hyde-park, W., the wife of Percival Horton-Smith, M.D., of Upper Brook-street, W., of a son.

HODGSON.—On Sept. 22th, at Blisworth, Northampton, the wife of Harold Hodgson, M.B., B.S. Lond., of a son.

KELLY.—On Sept. 11th, at Campbell House, Clapham-common, London, S.W., the wife of Mark Kelly, M.D., of a son.

MACKINNON.—On Sept. 27th, at Bath-road, Reading, the wife of Surgeon-Lieutenant-Colonel H. Mackinnon, D.S.O., late A.M.S., of a son.

RIDER.—On Sept. 23rd, at Acre-place, Stoke, Devonport, the wife of Alonzo G. Rider, M.B. Lond., of a son.

SIMPSON.—On Sept. 27th, at East Acton, W., the wife of G. A. Garry Simpson, M.R.C.S. Eng., of a son.

SPENCER.—On Sept. 25th, at Wentworth-villas, Tavistock-road, Plymouth, the wife of W. F. Spencer, M.D., Fleet-Surgeon, R.N. (retired), of a daughter.

SWAINE.—On Sept. 21st, at Gratton-road, W., the wife of Surgeon-Lieutenant-Colonel C. Lethbridge Swaine, I.M.D., of a son.

THOMPSON.—On Sept. 25th, at Payton House, Stratford-on-Avon, the wife of Arthur Thompson, M.B., of a son.

MARRIAGES.

CARSTAIRS—SWIFT.—On Sept. 23rd, at St. Mary's, Stansted-Montfichet, Herbert James Carstairs, M.R.C.S., L.R.C.P., of Worcester-park, Surrey, to Julia Gertrude, youngest daughter of Edmund Swift, Frondeg, Stansted, Essex.

FREER—TAYLOR.—On Aug. 15th, at St. Andrew's Cathedral, Singapore, Gerald Dudley Freer, M.R.C.S., Colonial Surgeon of Malacca, to Frances Maude Taylor, daughter of the late George Taylor, of Welford House, Bakewell.

HALL—WATKIN.—On Sept. 29th, at St. Barnabas', Beckenham, Edgar Atheling Hall, M.B., C.M. Edin., of Surbiton, to Ada Margaret, second daughter of the late John Watkin, of Leamington and Russell, N.Z.

MAY—PERN.—On Sept. 24th, at All Saints', Fulham, Percy May, M.R.C.S., L.D.S., of Endsleigh-gardens, N.W., to Katharine Mary Pern, of Dornciffe-road, Fulham.

MEGGS—BRICKWELL.—On Sept. 26th, at St. Mary's, Slough, Theodore Hugh Egbert Meggs, M.R.C.S., L.R.C.P., eldest son of the late Thomas Walker Meggs, of St. Kitts, West Indies, to Avice Viola third daughter of John S. Brickwell, M.R.C.S., L.S.A., of Upton, Villa, Slough.

OSBORNE—LONGFIELD.—On Sept. 24th, at St. James's, Piccadilly, Harold R. Osborne, Staff-Surgeon R.N., youngest son of Martin Osborne, St. Ives, Hunts, to Lily, only daughter of the late John Longfield, C.E., of Dublin.

POND—KING.—On Sept. 24th, at St. Barnabas Cathedral, Nottingham, Frank Pond, M.R.C.S. Eng., L.R.C.P. Lond., of Newtown, Desford, Leicester, to Izabel King, daughter of the late Richard King, M.D.

WHITE—BOTTRILL.—On Sept. 19th, at St. Michael's, Wood-green, William White, Surgeon, of Wood-green, to Emily Jane, widow of the late James John Bottrill of Wood-green.

DEATHS.

CHAWNER.—On Sept. 25th, 1896, at Hill House, Clay Cross, very suddenly, Alfred Leslie, aged 2 years and 5 months, youngest son of Alfred Chawner, L.R.C.P., M.R.C.S.

ERICHSEN.—On Sept. 23rd, at Folkestone, Sir John Eric Erichsen, Bart., F.R.C.S., aged 78.

HUMPHRY.—On Sept. 24th, at Grove Lodge, Cambridge, Sir George Murray Humphry, M.D., F.R.S., Professor of Surgery in the University of Cambridge, aged 76.

KNAPP.—On Sept. 27th, at Westgrove House, Emsworth, Hants, Surgeon-Major William Frederick Knapp, late of the Bombay Army, aged 54.

SMITH.—On Sept. 26th, at 9, Fellows-road, South Hampstead, aged 67, Dr. Henry Fly Smith, M.B. Oxon., son of the late Edward Osborne Smith, and only grandchild of the late Dr. Henry Fly, D.D., of the Chapel Royal, St. James's Palace, Sub-Dean of St. Paul's.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 1st, 1896.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Maximum Temp. Shade	Min. Temp	Rainfall	Remarks at 8.30 A.M.
Sept. 25	28·71	S.W.	56	·56	94	·61	52	0·47	Raining
,, 26	29·84	N.W.	52	50	71	61	50	0·30	Overcast
,, 27	29·85	S.W.	60	57	77	65	52	0·04	Cloudy
,, 28	29·85	N.W.	51	49	100	61	46	0·13	Fine
,, 29	30·10	S.W.	50	48	89	59	46	...	Raining
,, 30	30·37	N.E.	53	50	79	63	50	...	Hazy
Oct. 1	30·46	S.W.	47	47	62	56	48	...	Foggy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (5th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.).

TUESDAY (6th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (2 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY (7th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY (8th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.)

FRIDAY (9th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY (10th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY (7th).—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Dakin and others. Papers:—Dr. Lewers: A Case of Double Hæmatometra and Complete Absence of the Vagina.—Dr. T. G. Stevens: A Case of Completely Cleft Spine associated with an Unusual Visceral Malformation in an Anencephalic Fœtus.

THURSDAY (8th).—BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—Specimens. Paper:—Mr. Bowreman Jessett: The Early Diagnosis of Carcinoma of the Body of the Uterus and its Treatment by Total Extirpation, illustrated by Seventy-five Cases of Operation and Specimens.

FRIDAY (9th).—CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. W. G. Spencer and Mr. S. Tippett: Punctured Wound of Right Ventricle of the Heart through the Second Left Intercostal Space; Severe Primary and Three Secondary Hæmorrhages; Healing of the Wound; Subsequent Post-mortem Examination after Death from Disease.—Mr. R. Lawford Knaggs: Aseptic Inflammation following the Operation of Tapping in Certain Hydroceles.—Dr. F. Hawkins: Case of Hyperpyrexia with Double Lobar or Croupous Pneumonia (Jaundice); Recovery.—Mr. H. B. Robinson: Very Large Hydatid Cyst of Liver, involving Right Pleural and Peritoneal Cavities; Abdominal Section and Drainage.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (5th).—LONDON POST-GRADUATE COURSE.—Roy. Lond. Ophthalmic Hospital, Moorfields, 1 P.M., Mr. W. Lang: Clinical Examination of the Eye.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Mr. W. R. H. Stewart: Examination of the Ear.

TUESDAY (6th).—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Craig: Mania—Acute Hysterial, Acute Delirious.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr. Gowers: Introductory Lecture.

WEDNESDAY (7th).—LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars, 4.30 P.M., Dr. P. Abraham: Lupus and Scrofulodermia.—Roy. Lond. Ophthalmic Hospital, Moorfields, 8 P.M., Mr. A. Q. Silcock: Diseases of the Iris.

THURSDAY (8th).—LONDON POST-GRADUATE COURSE.—Brit. Inst. of Preventive Medicine, Gt. Russell-st., W.C., 3.30 P.M., Dr. Allan Macfayden and Mr. A. G. Foulerton: More Important Constituents of Normal Urine.—Central London Sick Asylum, Cleveland-st., W., 5.30 P.M., Mr. J. Hopkins: Clinical Lecture.

FRIDAY (9th).—LONDON POST-GRADUATE COURSE.—King's College, 3 to 5 P.M., Prof. Crookshank: The Microscope and Methods of Cultivation.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr. Tooth: Anatomy and Physiology of the Spinal Cord.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

THE INDEX TO THE LANCET.

The Index for the first half-yearly volume for 1896 was given in the issue of June 27th. The practice of supplying loose copies has been discontinued, the Index having been placed in the centre of the journal, whence it can easily be detached, and placed either at the beginning or at the end of the volume.

VOLUMES AND CASES.

VOLUMES for the first half of the year 1896 are now ready. Bound in cloth, gilt lettered, price 18*s*.

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s*., or post free 2*s*. 3*d*.

To be obtained on application to the Manager, accompanied by remittance.

ADDRESS WANTED.

To the Editors of THE LANCET.

SIRS,—Can any of your readers give me the present address of Mr. H. M. Crosby, M.B., C.M. Edin., who was assistant house surgeon at this hospital from October, 1894, to April, 1895, and was afterwards Assistant to a medical man in Nantwich?

I am, Sirs, yours faithfully,

HOWARD J. COLLINS, House Governor.

General Hospital, Birmingham, Sept. 28th, 1896.

THE INHALATION OF COMPRESSED AIR.

IN answer to "Pneumatic," whose letter appeared in our columns on Sept. 12th, we have received letters from Mr. J. H. Montague, 101, New Bond-street, W., and Messrs. Sumner and Co., 50A, Lord-street, Liverpool, saying that their respective firms are able to supply the apparatus alluded to.

THE MEDICAL PROFESSION AND PUBLIC MORALS.

To the Editors of THE LANCET.

SIRS,—In a novel which attracted much attention a year or two ago an eminent specialist is represented as saying, "The clergy have had a long innings. They have been hard at it for 1800 years, and society is still rotten to the core. It is our turn now. ..... I suppose eventually morality will be taught by medical men, and when it is much misery will be saved to the suffering sex." I venture to draw attention to this by no means new statement in order to ask if the profession is in any way alive to its responsibility in the way of educating the public sentiment. The fact as stated can scarcely be gainsaid. The clergy have to a great extent done their best, but their appeal is made from a platform to which the great majority of their hearers only respond nominally and ceremonially; it is fettered by the conditions of their public utterance and restricted by their ignorance of the scientific aspect of many social questions. But as yet the medical profession has not definitely made any attempt to deal with the social problems involved from an educational standpoint. Even in the case of those who come to us suffering from the effects of their own incontinence, how few receive any warning beyond the barest professional advice incidental to the treatment.

Speaking as one who has had some experience, especially among military officers, it seems to me that we are too reserved in speaking to the victims of gonorrhœa and syphilis. In the case of the younger ones the favourable opportunity may not have offered itself for blending sympathy with remonstrance; and in the case of many one has too readily assumed that they have a sufficient knowledge of what is implied in these names to know what the consequences of neglect may be or the far worse evils that propagation of the disease may entail. Our professional position is distinct from that of the clergy in this respect, that we deal with morality as it affects disease, and they with morality *per se*. The prevention of disease has lately been made the topic of a presidential address in the British Medical Association general meeting. Ignorance and recklessness are two of our chief enemies. How far the young should be instructed and warned on sexual questions may be a matter of opinion. But when a young man already infected comes to us it appears to me that he should be very plainly warned. A written statement, suitable for use in appropriate cases, should be in the consulting-room of every medical man. In it the danger of propagating diseases such as gonorrhœal ophthalmia or of syphilis by kissing, as well as the dire possibilities to wife and children, should be pointed out. Perhaps there may be some suitable tract. I believe many would be glad to know of it. I should like to invite your influential editorial opinion upon our moral obligations towards patients and society in general in this matter.

I am, Sirs, yours obediently,

Kashmir. ARTHUR NEVE, F.R.C.S. Edin., &c.

Dr. E. G. Dutton is thanked for his communication, which will receive attention. We agree with him that the facts are a little astounding at this stage of our social development.

THE TREATMENT OF SUPPURATION OF THE MIDDLE EAR.

IN a paper read before the Pennsylvania State Medical Society, and published in the *Medical and Surgical Reporter*, Dr. Lautenbach of Philadelphia describes a method of treating suppurative disease of the middle ear by means of an exhaust apparatus giving a pressure of from two ounces to four pounds per square inch. The ear having been cleansed by the ordinary method, this apparatus is in the next place employed for from three to ten minutes, about 300 exhausts being made per minute; drying and stimulating preparations are then applied in the usual manner. Dr. Lautenbach claims for this treatment that it often succeeds in reducing the infiltration and inflammation, and that the formation of lymph bands and other adhesions is avoided.

M.S. is recommended to communicate with Dr. J. Fletcher Little, 32, Harley-street, W., the secretary of the London Post Graduate Course. With the prospectus of the Course before him he will be able to see exactly what is offered and at what expense.

"AN INNOVATION."

To the Editors of THE LANCET.

SIRS,—In the issue of THE LANCET of Sept. 26th there appear two paragraphs commenting on an innovation in birth announcements. As the medical man whose name is brought so prominently before the public, will you permit me through your columns to say that no member of the profession could have been more thunderstruck and annoyed than I was when I read the announcement in the *Scotsman*? I need hardly say that I was not consulted by Mr. M'Kill previous to the insertion, or the intimation would have been expressed very differently. By inserting this disclaimer you will much oblige.

I am, Sirs, yours faithfully,

Rowan Bank, Bathgate, Sept. 28th, 1896. ROBERT KIRK.

*** We have great pleasure in printing Surgeon-Captain Kirk's disclaimer. Such an innovation could not escape notice, but we expressed our conviction that the offence lay with the grateful parent.—ED. L.

"PROCEDURE AT CORONERS' INQUESTS."

To the Editors of THE LANCET.

SIRS,—With this communication I enclose newspaper reports of the inquest and its two adjournments to which the letters of "Cyclops" and Dr. Brookhouse refer. These, I think, will satisfy you that Dr. Brookhouse's letter cannot be accepted as the final word in this matter. Briefly, the case was that of a young lady in good position and against whose character there was no breath of suspicion, who died from an illness the cardinal symptoms of which were gastric disturbance and fever, muscular and abdominal pains, hæmorrhage from the uterus, and ecchymosis in the limbs and trunk. Her medical attendant, Mr. Hooper, at first considered the case might be one of enteric fever. Dr. Brookhouse, who was called in in consultation, said it was abortion, and that the ecchymoses were due to violence through this having been effected by criminal means. On her death on the following day he advised Mr. Hooper to refuse a certificate and communicate with the coroner. This was done, and two independent medical men—Dr. Campbell and Dr. Eaton—were ordered to make a post-mortem examination. This they did in the presence of Dr. Hunter (on behalf of the young gentleman to whom the deceased was engaged) and Mr. Hooper. The evidence on the post-mortem appearances showed that the uterus was three inches in length and empty, that there was bloody effusion into the pleura and peritoneum, with peritonitis and fatty degeneration of the heart muscle. All were agreed that under the circumstances they were not warranted in adopting the theory of abortion. Dr. Brookhouse was not present, but his diagnosis was put before the jury, who in consequence failed to agree, and there was an adjournment so that he might be called. At the adjourned inquest the coroner allowed Dr. Brookhouse to examine Dr. Hunter, as spoken to by "Cyclops." The two were in hopeless disagreement, and the jury a second time failed to come to a decision. In the meantime, before the next meeting of the jury, Mr. Hooper, who had been very hardly dealt with both by the coroner and Dr. Brookhouse, employed a solicitor to look after his interests in the case. At his suggestion and by the wish of the jury fresh medical evidence was called. Dr. Ransom, physician to the Nottingham General Hospital, and Dr. Michie, surgeon to the Samaritan Hospital, spoke as to having each seen a fatal case of purpura hæmorrhagica in which uterine hæmorrhage was the prominent symptom. Both agreed that the congestion and slight enlargement of the uterus was simply consistent with the condition during a menstrual period; and that with no evidence of an ovum or part of an ovum and with an empty uterus it was simply impossible by digital examination to diagnose abortion. The jury accepted this view of the case and the inquest closed.

Dr. Brookhouse talks of the physical changes and condition of the uterus and the appearances of the breasts as being unequivocal signs in support of his theory. I do not know what he means by the changes in the uterus unless he refers to his statement at the inquest that the cervix was shortened. Mr. Hooper gave evidence that it was not shortened. Why it should be I am at a loss to know, even had there been an abortion. All modern authorities surely recognise that there is no shortening of the cervix till after the fourth month. It would seem that Dr. Brookhouse's ideas of the cervix in pregnancy are as much out of date as his estimation of the importance of the corpus luteum, to which he makes reference. As to darkening of the areola round the nipple, I think we are all agreed at this time of day that that in itself is not good evidence of pregnancy, and that without a comparative examination at a time when there is no such suspicion it is no evidence at all. There is one point, part medical and wholly common-sense, which naturally suggests itself in connexion with this case on which I would ask Dr. Brookhouse to ponder. The aunt with whom the girl lived in her evidence said that the deceased had always menstruated regularly and that she had so menstruated from three to four weeks before the final hæmorrhage at her death. How, then, under the circumstances, was she to become possessed of the idea of pregnancy, which would lead up to the criminal abortion for which Dr. Brookhouse contends? He does not suggest, I suppose, that it was resorted to on chance. Although purpura hæmorrhagica is by no means a common disease, still its features are clearly laid down in the literature on the subject. The Radcliffe case was by no means an exceptional example. There was the history of failing health, with anæmia and shortness of breath, the gastric disturbances and fever, the darting pains, the purpuric rash, bleeding from the gums and uterus and into the serous cavities, peritonitis from the sanious effusion being a recognised symptom. The fatty degeneration of the heart again is significant of purpura. I attach no importance whatever to Dr. Brookhouse's "unequivocal" signs of pregnancy, and it is hard to understand how a man of his experience should so persistently parade them. As far as indications go in this neighbourhood he fights his battle single-handed. There may be a spice of the heroic in this. I fear, however, that such heroism is but akin to that "dogmatism which so often spells error."

I am, Sirs, yours faithfully,

JOHN MACKIE.

Shakespear-street, Nottingham, Sept. 28th, 1896.

Dr. Gower Williams is thanked for his communication, which we have duly received.

AN ELIZABETHAN PARISH DOCTOR.

To the Editors of THE LANCET.

SIRS,—Now that the remuneration of medical men is so much discussed the terms on which a parish medical officer in 1571 held his appointment may be of some interest.

In the Lease Ledger Folio of the City of Chester is an agreement between Alexander Harrison, surgeon, and the mayor of that city. The surgeon undertakes to treat the poor of the city without recompense, in return for his "freedom" and the use of a house—apparently of some size—for a nominal rent. As the document is rather long I only quote the more interesting parts: "Noverint universi per presentes me Alexandrum Haryson de Cestr'in com. civitatis Cestrie, cirurgicum, teneri et firmiter obligari Ricardo Bavand et Willmo. Wall, Thesaurariis civit. Cestrie in *viginti libris* legalis monete Anglie solvend 'eidem Thesaurariis vel succussoribus suis. ..... 9 Julii, 16 Eliz." "The condicion of the obligacion is that Alex. Harrison hath made his humble peticion and request unto Ric. Dutton, Esquire, now maior of the Citie of Chester, and others the justices of the same citie, to be admitted and receyved into the frannches and liberties thereof, promising that in consideration of the same he will to the uttermost of his power, knowledge and skill as well see unto, *cure, heale all* the deseased sicke, poore people which live, or hereafter shall live, by the reliefe and almes of the saide citie, without any reward, fee, or other recompence, and all other cytizens which shalbe infected with any disease for such reasonable some or somes of money as shalbe limited and appointed by the maior. ....." "Lease to Alex. Haryson, 2 Aug., 16 Eliz., surgeon, servante to our said soveraigne ladie the Quene, a messuage in Northgate Strete, together with all chambers and lofts, rowmes, backsides, cellers, solars, entrees, &c., 7*s.* 6*d.*"—Lease Ledger Folio, p. 13A. It reads as if he must let none die or pay the forfeit, but his pauper practice, if anxious, could hardly have been large, for in the previous year only 120 persons received poor relief. We are not told what the scale of private fees was, but without his "freedom" could he have practised at all?

I am, Sirs, yours faithfully,

Tattenhall, Chester, Sept. 28th, 1896. H. WHICHELLO.

A. C.—We know of no such society. A list of the benevolent societies of the profession will be found at page 730 of our Students' Number, which was published on Sept. 5th.

DECEIVING ADVERTISEMENTS.

WE have received the circular of a quack practitioner who calls himself, "Member of the College of Safe Medicine, Limited, London." We append a reproduction of one page of this effusion and wish to draw our readers' attention to the cunning manner in which our name is used.

"PALATINOIDS."

(BY ROYAL LETTERS PATENT.)

A Scientific Form of Medication.

Awarded the only GOLD MEDAL at the International Medical Congress for quality and originality.

Dr. R—TH writes: "I have tried them as Compressed Tablets, Gelatine-coated Pills, and in Palatinoid Form, and prefer the last because: They are easily swallowed. They leave no unpleasant taste in the mouth. Not being compressed they act quickly."—THE LANCET, May 25th, 1896.

THEY ARE THE BEST LIVER MEDICINE EVER INVENTED.

TASTELESS,
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BLAUD'S PILLS REDUCED TO 10½d. PER GROSS BOX.

The quotation is correct, but the date is wrong, and we need not say that the palatinoids mentioned by the writer in our columns were not prepared by Mr. Scurrah, though of course any one reading the circular and ignorant of facts would imagine, as is intended, that they were. This sort of deception is not easy to be stopped. However, we think it quite time that some check should be put upon lying advertisements in whatever trade or profession they occur, and more especially the practice of using press notices entirely apart from their proper context. We may mention that Mr. Scurrah also advertises "Special Female Corrective Pills (Orange) 1/- per box."

"CLUB PRACTICE IN WYNAAD."

To the Editors of THE LANCET.

SIRS,—As I have been recently advertising in your columns and in those of the *British Medical Journal* for a medical man for Wynaad will you allow me space to answer the letter which appeared in your issue of Sept. 26th, headed "Club Practice in Wynaad" and signed "Fairplay." I will not deal in detail with the first part of the letter as I gave all particulars concerning the Wynaad to all the likely applicants. But I must deny the statement "that Wynaad is highly malarious, especially during five or six months." In my opinion, given after twenty years' residence in the district, it is fairly healthy, but it is malarious in the months of March, April, and May, when the first showers fall after the long season of drought and before the south-west monsoon, with its heavy rains, has fairly set in. The gross inaccuracy which I wish to point out is the statement—"three of my predecessors left with disgust each in a few years, and one died of malaria after a few day's illness." These are the facts of the case. When I went to the district in 1876 there was an old P. and O. medical man established there (not under the club system) who died of liver complaint at the end of 1877. After the interval of two years, during which we were served by apothecaries, we secured in 1879 the services of a young medical man from the Stafford House Committee who had been employed by them in the Russo-Turkish war. He also was not under the club system, but made his own arrangements. He stayed with us until 1885, when he went to Australia to better his position. From that date until 1887 we were again served by native and Eurasian apothecaries. In 1887 the club practice began, and we engaged the services of a practitioner from Bombay, who stayed with us until 1893, when he took up a better appointment in Assam. This gentleman has now applied to me to be reinstated in his former position. The medical man who succeeded him is still in the district, and I have not heard from Wynaad the particulars as to why he is leaving.

I am, Sirs, yours faithfully,

GEORGE ROMILLY.

Mr. B. B. Gough.—The writer referred specially to an Account of the Life of John Fothergill, M.D., F.R.S., in the third volume of the "Works of Fothergill," by John Coakley Lettsom. "Printed for Charles Dilly, in the Poultry, 1784." Notices of the life of Dr. Abercrombie will be found in encyclopædias, &c.

PATENT MEDICINE ALMANACS AND THE PREVENTION OF PHTHISIS.

THE *Journal of the American Medical Association* states that the New Mexico Territorial Board of Health, in a recent circular on the prevention of phthisis, recommends, among other things, that "every person so affected should spit into some receptacle and should see that the sputum is soon destroyed by fire. About the house there is no better way than to spit between the leaves of patent medicine almanacs, and after half-a-dozen or more spittings burn the book."

A. B. Z.—We regret to be unable to answer our correspondent's questions. For an answer to the first we recommend a study of Professor Michael Foster's or Dr. Augustus Waller's treatise on Physiology. To the second he will obtain no definite answer anywhere, but most psychological and physiological treatises contain speculations.

Ajax.—We can understand that the close attention and labour both to eye and hand demanded by the occupation might lead to nervous derangement. The physician who saw the patient could alone say what was the precise nature of his condition or the "name of the complaint."

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received:—*Worcester Echo, Birmingham Argus, Eastern Morning News, Wolverhampton Chronicle, Kidderminster Shuttle, Essex Telegraph, Scotsman, Brighton Gazette, Cromer Post, Llandudno Directory, North Wales Chronicle, Liverpool Daily Post, North Wilts Herald, East Anglian Daily Times, Norfolk Daily Standard, Sussex Daily News, Yorkshire Post, Times of India, Leicester Post, Pioneer Mail, Western Daily Mercury, Richmond Herald, Leeds Mercury, Builder, Oban Times, Sheffield Independent, City Press, Newcastle Journal, Sanitary Record, Bristol Mercury, Local Government Chronicle, Reading Mercury, Weekly Free Press and Aberdeen Herald, Mining Journal, Herfordshire Mercury, Todmorden Advertiser, Lancaster Standard, Family Doctor, Willesden Chronicle, Guy's Hospital Gazette, Local Government Journal, Surrey Advertiser, Australasian Medical Gazette, Toronto Mail, Poole Herald, Public Opinion, Arbroath Herald, Westminster Gazette, Bristol Times and Mirror, Educational Times, St. Bartholomew's Hospital Gazette, Hereford Times, South American Journal, Market Harborough Advertiser, Cape Times, Gibraltar Chronicle, Walsall Observer, Bristol Observer, Architect, Shrewsbury Chronicle, Western Evening Herald (Plymouth), Western Daily Mercury, Indicator, &c., &c.*

Communications, Letters, &c., have been received from—

A.—Mr. E. G. Annis, Huddersfield; Dr. A., Ulverston; Messrs. Anthony Bros., Hereford; Ashton-under-Lyne Town Hall, Supt. of; Dr. Clifford Allbut, Cambridge; Mr. W. Aylwin, Lond.; Mr. T. H. Agnew, Cheetham; A. C., Morley; Alpha Omega, Lond.; A. B. Z. Manchester; Mr. W. F. Adams, Plymouth; Ajax, Lond.

B.—Mr. J. H. Busteed, Edin.; T. B. Browne, Ltd., Lond.; Bradford Infirmary, Sec. of; Surg.-Lieut.-Col. S. H. Browne, Lond.; Dr. Bridgeford, Lond.; Messrs. Burgoyne, Burbidges and Co., Lond.; Dr. H. T. Blake, Lond.; Mr. W. Berry, Wigan; Dr. G. P. Boddie, Edin.; Dr. Byrom Bramwell, Edin.; Mr. F. E. Bennett, Lond.; Mr. C. Birchall, Liverpool; Mr. J. Bottomley, Rotherham; Birkenhead Borough Hosp., Hon. Surg. of; Mr. G. K. Bigg, Lond.

C.—Mr. J. E. Cornish, Manchester; Chelsea Hosp. for Women, Lond., Sec. of; Cortland Wagon Co., Lond.; Rev. S. Crawley, Oddington; Dr. W. Collingridge, Lond.; Messrs. A. Cohen and Co., Lond.; Messrs. Clayton Bros., Lond.; Dr. W. H. Corfield, Lond.; Mr. F. Foord Caiger, Lond.; Mr. E. Collings, Sawbridgeworth; Dr. J. Cousins, Southsea; Dr. F. E. Carey, Guernsey; Mr. R. Clayton, Davenport, Iowa; Messrs. R. Clay and Sons, Lond.; Cambria, Lond.; Dr. W. G. Creswell, Saltley; Church Society for the Promotion of Kindness to Animals, Lond., Hon. Sec. of; Mr. R. B. Carter, Lond.

D.—Mr. T. W. Deakin, Flitwick; Mr. E. Donaldson, Londonderry; Messrs. W. Dawson and Sons, Lond.; D. N., Lond.

E.—Epidemiological Society, Lond., Hon. Sec. of; Messrs. Elliott, Son and Boyton, Lond.

G.—Mr. B. B. Gough, Lond.; Grand Atlantic Hotel, Weston-super-Mare, Proprietors of; Gig, Lond.

H.—Mr. P. Hayes, Bury; Hosp. for Consumption, Brompton, Sec. of; Mr. C. H. Huish, Lond.; Messrs. Harrington, Latham and Co., Coventry; Miss Hart, Bedford; Dr. R. Hutchinson, Edin.; Mr. Henry Holden, Wimbledon; Dr. G. Heron, Lond.; Dr. A. D. Hodges, Lond.; Mr. J. Heywood, Manchester; Messrs. Hirschfeld Bros., Lond.; Hulme Dispensary, Manchester, Hon. Sec. of.

J.—Mr. G. Jackson, Plymouth; Mr. J. J. Jones, Lond.

K.—Mr. R. C. B. Kerin, Lond.; Messrs. R. A. Knight and Co., Lond.; Messrs. Keith and Co., Edin.

L.—Mrs. J. Livey, Astley Bridge; Lithanode Electric Storage Co., Lond., Chairman of; Dr. J. F. Little, Lond.; Mr. A. Littlewood, Leeds; Mr. J. Lane, Lond.; Messrs. E. and S. Livingstone, Edin.; Messrs. Lee, Knight and Co., Liverpool; Dr. E. Landoit, Paris.

M.—Dr. J. Macintyre, Glasg.; Messrs. H. Marshall & Co., Lond.; Medicus, Harrogate; Messrs. Macmillan and Co., Lond.; Dr. E. G. A. Morshead, Guildford; Mr. J. Mackie, Nottingham; Mr. A. Morrison, Skipton-in-Craven; Dr. J. C. McVail, Glasg; Prof. Middendorp, Groningen; Mr. A. M. Mills, Kingston, Jamaica; M. S., Crich; Medical Society of Lond., Hon. Sec. of.

N.—Messrs. Neyroud and Son, Lond.; Northampton General Infirmary, Hon. Sec. of.

O.—Mr. F. A. Osborn, Scalloway; Messrs. Oliver and Boyd, Edin.; Oldham Infirmary, Hon. Sec. of; Messrs. Oppenheimer, Son and Co., Lond.

P.—Mr. Young J. Pentland, Edin.; Peter Paul Book Co., Buffalo, N.Y., U.S.A.; Messrs. Parke, Davis, Lond; Mr. B. Powell, Lond.; Mr. C. E. Paget, Salford; People's Palace, Lond.; Peptenzyme Co., Lond.

R.—Mr. H. A. Roechling, Leicester; Royal Naval Hosp., Gt. Yarmouth, Fleet-Surg. in Charge; Raleigh Printing and Publishing Co., Lond., Manager of; Mr. W. A. Richardson, South Tottenham.

S.—Dr. W. Shackleton, Hereford; St. Marylebone Parish, Guardians of; Swansea General Hosp., Sec. of; Stretton House, Church Stretton, Med. Supt. of; Messrs. G. Street and Co., Lond.; Messrs. Smith, Elder and Co., Lond.; Mr. A. G. Southcombe, Lond.; St. Luke's Hosp., Lond., Steward of; Dr. H. Simpson, Budleigh-Salterton; Dr. W. K. Sibley, Lond.; Mrs. Sandeman, Edin.; Messrs. Sharland and Co., Lond.; Mr. J. R. Seymour, Lond.; Dr. Richard Sisley, Lond.; Capt. W. H. Swinton, Exeter; Messrs. Street Bros., Lond.; Mr. F. A. Southam, Manchester; Dr. J. Stevens, Mid-Calder.

T.—Dr. H. Tilley, Lond.; Mr. J. H. Thompson, Manchester; Dr. O. B. Trumper, Harrogate; Mr. J. A. Thorne, Edin.; Sir William Turner Jedburgh, N.B.

V.—Dr. E. D. Vanderburgh, Hainan, Hong Kong; Mr. W. P. Van Wyk, Lond.

W.—Mr. W. W. Wagstaffe, Sevenoaks; Messrs. J. Wright and Co., Bristol; W., Lond.; Wigmore Nurses' Institution, Lond., Lady Supt. of; Mrs. Walker, Glenbeigh; Mr. M. A. Wilson, Pannal; Wolverhampton Eye Infirmary, Sec. of; Dr. R. Wisken, Lond.; Dr. A. G. Welsford, Dover.

Y.—York County Hosp., Sec. of.

Letters, each with enclosure, are also acknowledged from—

A.—Dr. A. Anderson, Sheffield; Dr. M. Ashley, Ivybridge; Alpha, Lond.; A. B., Leicester; A., Aldersgate-street; A. B. C., Lond.; Mr. A. H. Aldridge, Shawforth.

B.—Mr. G. H. Brand, Northampton; Bachelor, Lond.; Mr. R. W. Braithwaite, Rickmansworth; Mr. E. H. Beaman, Misterton; Messrs. F. Benger and Co., Manchester; Beta, Lond.; Beta, Liverpool; Barnard, Lond.; Messrs. Blondeau et Cie, Lond.; Messrs. J. Bell and Co., Lond.; Dr. G. Butters, Kempston.

C.—Mr. H. Case, Blackpool; Messrs. A. Cohen and Co., Lond.; Carpus, Lond.; Coelebs, Lond.; Mr. J. Carter, Lond.; Mr. F. W. Clarke, Manchester; Mr. A. Chawner, Clay Cross; Dr. R. Cox, Theale; Mr. W. H. Clark, Newbridge.

D.—Dr. E. A. Doyle, Leigh, Lancs.; Dr. J. C. Davies, Emmetsburg, Iowa, D.

E.—E. D., Lond.; Mr. R. Edwards, Llanfyllin; E. F., Liverpool.

F.—Mr. J. J. Fanning, Roscrea; F.R.C.S.E., Lond.; Fraternal, Acton; Dr. W. A. Foxwell, Birmingham; Messrs. A. Faker and Co., Lond.; Mr. Forsaith, Lond.; F. F. W., Lond.; Fibula, Lond.

G.—Mr. W. Gem, Greytown, Natal; Mr. E. H. Griffiths, Lampeter; Mr. J. A. Grant, Derby; Mr. T. Gibson, Lond.; Mr. J. Griffiths, Llanberis; Genuine, Lond.; Globe Advertising Co., Aston Clinton; Dr. C. B. Gunn, Peebles; G. W., Lond.; Mr. J. H. Glen, Dublin; G. F., Snaresbrook; Mr. F. R. S. Gaman, Cosham.

H.—Mr. V. Harcourt, Maidstone; Mrs. Hitch, Hollington; Messrs. Hertz and Collingwood, Lond.; Mr. A. Heath, Derby; Mr. J. Holden, Willoughbridge; Mr. G. Hermanni, Lond.; Mr. J. Hopper, Hull, Messrs. H per and Co., Lond; H. J. W. Leytonstone.

J.—Dr. W. Jamison, Penrhiwceiber; Jeyes' Sanitary Compounds Co., Lond.

K.—Mr. W. V. Kane, Nagpur, India; Mr. F. H. Knaggs, Huddersfield; Mr. M. A. Kirton, Devonport.

L.—Mr. A. J. Lappin, Gilford, co. Down; Dr. W. Lyle, Newtonstewart; Mr. G. L. Lewis, Penycwm; Dr. D. Lawson, Banwell; L. B., Lond.

M.—Dr. A. E. Mahood, Appledore; Messrs. Manlove, Alliott and Co., Nottingham; Mr. S. B. Mason, Pontypool; M., Lond.; Mr. J. E. H. Mitchell, Church Stretton; *Montreal Medical Journal*, Sec. of; Messrs. A. Melville and Sons, Dunbar; Dr. W. Mailer, Perth; Medicus, Manchester; M.R.C.S., London; Mr. E. T. Mortimer, Ounalaska, U.S.A.; Med. Officer, Stronsay; Dr. J. Martin, Acocks Green; Manchester, Lond.

N.—Mr. W. J. Nichols, Boscombe; Newcastle-on-Tyne Dispensary, Hon. Sec. of.

O.—Mr. A. Oberfoell, Lond.; Octo, Lond; Omega, Lond; Dr. P. T. O'Sullivan, Cork; Mr. N. M. Ogle, Lond.; Omicron, Lond.

P.—Mr. Chas. Parker, Caistor; Plymouth Borough Asylum, Ivybridge, Clerk of; Princeps, Lond.; Patrington Rural District Council, Accountant of; Dr. E. J. Pritchard, Hinckley; Pustule, Lond.; Dr. D. E. Powell, Cardiff.

R.—Dr. A. G. Rider, Stoke, Devonport; Mr. E. Roberts, Pokesdown; Royal Ear Hosp., Lond., Sec. of; Mr. W. Reeve, Lond.; Dr. T. H. Redwood, Rhymney; Mr. H. M. Riley, Leicester; Mr. R. Roberts, Ludlow.

S.—Mr. J. S. Sharman, Lond.; Storrs, Doncaster; Messrs. J. P. Segg and Co., Lond.; Messrs. Slinger and Son, York; Santa Anna Gold Mining Co., Lond.; Surgeon, Liverpool; Mr. A. B. Sturges, Parwich; Standard, Lond.; S. B. B., Lond.; Dr. C. B. Savory, Haverfordwest; Dr. J. Stewart, Batley; Statim, Lond.; Surgeon, Cardiff.

T.—Mr. J. J. Tate, Weston-super-Mare; Mr. D. C. P. Taylor, Highworth.

V.—Vera, Lond.

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